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THE JOURNAL OF THE Arkansas Medical Society

Owned and Published Monthly by the Arkansas Medical Society

VOLUME XIII
No. 1

LITTLE ROCK, JUNE, 1916

Yearly Subscription $1.00
Single Copy 25c

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THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIII. LITTLE ROCK, ARK., JUNE, 1916 No. 1

President's Address.

Delivered at Fortieth Annual Meeting of the Arkansas Medical Society at Texarkana, May 2, 3, 4, 1916.

Gentlemen of the Arkansas Medical Society:

I wish to express to you, the members of this society, my sincere appreciation of the great honor you have conferred upon me in electing me your president. This position was unsought, and in my humble way I will strive to serve you to the best of my ability. I am, as you know, not of a literary or oratorical bent, and I crave your indulgence and attention to a very plain but heart-felt message, upon matters of vital importance to the welfare of our society and of the profession of the State of Arkansas.

It is just twelve years since we met in this place, and I might profitably review with you the wonderful advances and new discoveries of this period. But the desire is tempered, and my ardor is cooled, when I realize that while the Medical Society of Arkansas has made some advancement, it has not quite kept step with the vanguard in these twelve years. Hence, I feel that we should not spend time in pluming ourselves in satisfied pride at the gratifying achievements of the profession, because "sackcloth and ashes" would be more appropriate for us while we consider and lament upon our shortcomings.

I am come to criticise, and if I use the cautery, remember it is with the loving hand of brotherhood. I shall deeply regret if anyone take umbrage at my remarks. My purpose is to stimulate you, to help this society to work out a plan, to be put into immediate execution, which will permit of some member, next year, delivering a laudatory address that I cannot in honesty make at this time.

There are, in every county in our state, in most every township of every separate county, many noble practitioners of medicine, whom we need in our State Society, and who need us. Many of them are humble country doctors, but physicians any man might well be proud to know. They have good books, and read them; they have many cases, and study them profoundly; they do not use ready-made diagnoses nor "shotgun" formulas concocted by the ton; they are "peers" in the practice of their art and in their knowledge of our science; they are respected in their communities and are well beloved because of their true worth, nobility and competency.

Would not an influx of such men give an impetus to our meetings? If those were here who ought to be, would not this be the greatest meeting in the annals of the Arkansas Medical Society? Why are they not here? Whose is the fault? How shall it be remedied?

First, I arraign myself. Next, I plead guilty to slothfulness and indifference and negligence. Thirdly, I accuse all of you of the same sins of omission and commission to which I have confessed, and ask all who wish to plead guilty to step up here on the platform with me. No, never mind coming up—there is not room—it is unanimous.

The consensus of opinion is that such a body cannot fail in accuracy of diagnosis. What is the indicated remedy? The remedy, gentlemen, is easier to select than was the construction of the diagnosis.

Arouse the county societies! If our county societies were right, the State Society would be right. And the State Society will *never be right* till we get the county societies right. We must get vim and vigor into them if we have to do it by violence. It is of no use to hope for any benefit from the scant supply of new blood coming in through the customary channels in the customary methods. We want to "go out into the byways and hedges and compel them to come in," and by the very

effort thus put forth we will arouse our own stagnating blood and make it circulate in leaps and bounds. If I can rouse an answering spark in the breasts of the presidents and secretaries of the various county societies; if they will go home and go to work, our meeting next year will be a glorious phenomenon.

Our secretary informs me that if he enforced the rule providing that county secretaries must make their reports before March 1st, or be dropped from the rolls, that he would not have ten county societies in good standing. He says further, that prompt reports would decrease his work 75 per cent. He adds to the arraignment the expression of his belief that fully one-half the county societies do not hold more than one to three meetings in a year, and that some counties have not had an election in the last two years. Is not that an awful state of affairs? There is much to do. The American Medical Association must be supported in its magnifieent efforts, but it cannot be done by feeble State Societies supported by marasmic county organizations.

The time is ripe for concerted and effective action all along the entire line. Standards of medical requirements are being steadily elevated. The men now entering the profession, represent a degree of culture yielding the flower of manhood; more difficult curriculum and more rigid legal requirements are contributing to place the profession in future on a higher plane than ever before. Charlatans are busy; the "dope" distributer is aetive; "Christian Science" and a horde of equally foolish cults are flourishing; pharmacists are seeking to wrest from us the right to handle medicine or make out death certificates; slaughtered multitudes attest a laek of knowledge of hygiene and sanitation; the laity are left in ignorance of how to defend themselves against typhoid fever, malaria, tuberculosis, venereal diseases, and a host of woes to which they fall easy victims through their pitiful ignorance.

Yet with every encouragement to valiant endeavor, in full knowledge of the forces of evil arrayed against us, we are supinely indifferent in the face of the greatest opportunities ever accorded the profession. A unified profession at this time could achieve magnificent things for humanity. But to do this, we must work in harmony, each giving to the other whatever of advantage he may have to contribute for the common weal. Banish paltry bickerings! Forget puerile jealousies! Recall the Aesculapian oath and reconsecrate the best that is in you to the uplift of the profession and the progressive betterment of your fellow-man.

It is "personal work" that we need, and it is "personal work" only on which we can rely for success in this certain rejuvenation. Let every secretary and every president of every county society here represented make this solemn resolution: "I will go to work, and keep working, for the good of my society, my fellow-man, and for humanity, until I have every deserving man in my county within the bounds of my society."

Get in touch with every deserving man in your county immediately. Impress upon him that *he needs* the benefits association confers, and that *we need* his presence and influence. Maybe he is isolated, and you cannot conveniently see him—then write him a friendly and personal letter from which enthusiasm fairly oozes. Wait two weeks, and if he does not reply, write him again. Keep it up every two weeks until you *get* him. The most indifferent person is always impressed by militant persistency. Do not make the error of having letters of invitation printed—too cold and formal, and likely to be ignored.

If you must use printed matter, get out a little sheet monthly, and send it to every available man. Make it the size to go in an ordinary letter envelope. Fill it with items of interest to every physician, such as the latest quotations on commonly used drugs; recent marriages and deaths among the profession; a few well-selected humorisms; a snatch of poetry; a line or two of philosophy, etc. Interlard the paragraphs with invitations to join the county society. Invite eriticisms. Ask for suggestions. Make every delinquent understand that you are getting out this little monthly sheet in his interest, and for his benefit, whether or not he is a member of the society. He will be interested in spite of himself, and you can soon make the little messenger a welcome and looked-for visitor. Call it "Medical Fraternity," or by any other "catchy" title. Keep it teeming with vim and life, and it will bring results.

There is not a secretary of any county society in this state who cannot do this. It looks more formidable than it really is. A few hours of work, at intervals, through the month, will provide the copy—much of it may be secured by "clippings"—and the printer will proofread and eorrect errors. The printer will get it back in your hands

within forty-eight hours from the time you give him the copy. The expense is slight, and the results are astounding where the effort is honest and the enthusiasm is genuine. This is not offered with any claim to originality, but in the confidence that it will succeed in Arkansas as it has succeeded elsewhere.

Inject a little social atmosphere into the meetings of your County Medical Society. Try to have at least one good specialist from some of the cities at each meeting, and get him to deliver an address upon some interesting phase of his specialty. Announce his coming in your little county medical leaflet, and give his subject. It requires no effort at all to provide this feature, as all such men are glad to come and speak upon the things next to their heart. Two or three times a year arrange a little social to follow the meeting, and make the invitation to the ladies a prominent feature in your leaflet. Get some local talent for a vocal or instrumental selection—in many places they will gladly entertain without charge, in consideration of the fact that this will spread abroad the fame of their voice or skill. Notify one of your members whose ability is known in that line, that he will be expected to tell some amusing stories, or read a short humorous sketch.

If the secretary of any county society will do this, he will be amazed at the attendance of old members, and he will find that it will be easy to obtain applications for membership from men who have never been interested before. Many will attend because of the combined features, who could not be induced to come to a strictly medical meeting.

Nor must we, if we would accomplish the best results, be too rigid in condemnation of those we might consider as hardly up to the standard of requirements for membership. I am not advocating a lowering of the standards, nor of gathering in nor of retaining undesirables; but what I do wish to emphasize is that we may not be exercising all of the fraternal fellowship the outsider has a right to expect. If we were to become better acquainted with some men we now condemn; if we talked with them in a brotherly manner, and suggested why certain actions were viewed with disfavor; if we intimated that slight modification of conduct would be gratifying to those who would like to be friends and extend the right hand of full fellowship; that the doors of the society were always open and waiting and a welcome was always certain to those who gave evidence of desire to accord with the principles all men acknowledge as just and right, we would get their viewpoint, and would then be in position to urge our claims to their interest and comradeship. Many a man has been made ethical by being taken into a county society, where he had opportunity of learning the principles of ethics; he had been a transgressor only through ignorance.

It is an easy matter, if any member of any society persist in transgression of the rules and principles of the organization, to discipline or dismiss him from membership. Do not hesitate to take a man in because you fear that it will be necessary to apply such discipline. The chances are strong that, if he is once admitted, he will become docile, enthusiastic and effective. If we can once realize that our attitude is not appreciated by the outsider; if we can twist our perceptions into the line of his vision; if we can get in close touch with him, then, and not till then, can we be in position to argue the matter with him. *We know* that there is no valid argument against membership in the Arkansas Medical Society, but the men outside the pale think that there is. We cannot change their point of view until we honestly feel kindly enough toward them to take their hand in a brotherly manner, and try to lead them into a place where they can see the light.

Every member of this society can do something in this line. You can think right now of a man whom you ought to approach in this manner. Put aside your pride, diffidence, laziness, or whatever it is that permits you to clog the wheels of our advance to greater membership and increased enthusiasm, and bring in this man. If you do this, and if I do it, and if we all do it, we will not only have done our duty, but we will increase our membership 100 per cent in the next year.

DO YOU KNOW THAT

Sags in roof gutters may act as mosquito breeding places?

America's most valuable crop is babies?

The public cigar-cutter is a health menace?

The United States Public Health Service maintains a loan library of stereopticon slides?

The typhoid rate measures accurately community intelligence?

Bad housing produces bad health?

PROCEEDINGS OF THE

FORTIETH ANNUAL SESSION

OF THE

Arkansas Medical Society

Texarkana, May 2, 3, 4, 1916

HOUSE OF DELEGATES.

ELKS' LODGE, TUESDAY, MAY 2.

Dr. J. C. Wallis, president, called the House of Delegates to order at 9:00 a. m.

Invocation by Rev. P. C. Fletcher.

O Lord, our Father, before the mountains were brought forth, before ever Thou had formed the earth and the world, even from everlastiug to everlasting, Thou art God. This morning we would lift up our eyes unto Thee from whence cometh our help. We realize that Thou art the source of our being, our joy, our consolation, our salvation, and we come to Thee this morning because there is none other to whom we can come. Thou only hast the words of eternal life. Thou art great; Thou art good; Thou art gracious; Thou art all aud iu all. We thank Thee this morning for life, because it gives us a chance to live and to work and to pray and to play and to look up at the stars. We thank Thee for mauhood; we thauk Thee that it is iupartial; that it needs not the rite of coronation; that it is crowned already; that its majesty is supreme in all lands, all ages and all worlds. We thank Thee this morning for this assemblage of good physicians, these ministers of health, these evangels of healing. O Lord God, graciously bless these Thy servants in the great work that they are doing for the alleviation of the sufferings of humanity and for the advancement of iufinite good among men. Be pleased to graciously bless us all, and forgive our sins, for we ask these mercies in the name of the Great Physician. Amen.

The president appointed the following Committee on Credentials: M. L. Norwood, Geo. B. Fletcher and H. H. Rightor.

Dr. Norwood: The Committee on Credentials begs to report:

W find sixty counties have paid their dues; thirty-one are necessary on roll call. There are six members present from six of the societies who have not sent delegates. We would ask the Council to seat the following to make a quorum: Shipman of Ashley, Simpson of Clay, Lemons of Jefferson, McCarroll of Lawrence, Cooper of Sebastian, Cleveland of White, which will make thirty-one, a majority of the delegates.

Dr. Snodgrass: I move that they be seated.

Seconded by Dr. Kirby. Carried.

The chair declared a quorum present.

ADDRESS OF WELCOME.

Dr. T. F. Kittrell of Texarkana:

I don't believe I ever heard but one address of welcome. That was a good many years ago. It was wholly made up of poetry, oratory and rhetoric. And, when I was a small boy, the greatest difficulty, except one, that I had was to memorize poetry, and a greater one was to recite it. I just want to say this morning, on behalf of our Miller County Medical Society, and its twin sister, the Bowie County (Texas) Medical Society, that we feel honored to have you with us. We welcome you, and we hope you will have a good time. We hope that this will be as good, if not the best meeting that you have ever had. We want you to know that the latch string is on the outside. Again we bid you welcome to our city.

RESPONSE TO ADDRESS OF WELCOME.

Dr. L. P. Gibson of Little Rock:

Mr. President and Delegates:

Rabbi Harrison of St. Louis is one of the most lovable men and one of the distinguished orators in the United States. He is called upon to make addresses on all occasions in St. Louis and elsewhere, at banquets and social gatherings where oratory and good sense prevail. On one occasion he was in the corridor near where a banquet was being held, and a speaker who was on the program was absent; someone saw the rabbi in the hall and asked him to come in and respond to the toast. They introduced him. He said, "Gentlemen, really, you will have to excuse me. It is growing very late, and you all know I belong to a people who believe in 'cutting it short.'" I understand now why Dr. Kittrell's address was cut so short.

The story is told of a distinguished surgeon whose name I would mention were it not for the fact that he shrinks from publicity, that he has a practice of charging twenty-five dollars for the first office visit and five dollars for each subsequent visit. One of his "prospects" having heard of this, and thinking to get in on second-visit price, walked in and said, "Well, doctor, here I vas again." Dr. ———— looked at him and said, "Well, just continue the same treatment."

Gentlemen, we were here in 1904, and if you continue, as I know you will, the same treatment, we could ask for no better reception or entertainment. Knowing this country to be a wild land, full of game, "I came loaded for bar." For fear that I might go off half-cocked, I have prepared a few thousand words that I thought would be appropriate for the occasion, and I shall proceed to shoot them off.

In 1838 a German by the name of Gerstaecker, traveling through the United States, came from St. Louis and through Arkansas. He came on foot, with his rifle, tomahawk, bowie knife, hunting bag and a little "bottle." He slept out at night, and accepted the hospitality of people at that time. Unlike some other more distinguished "hunter-naturalists" he didn't have brass bands playing, circus tents and things like that. He stayed with the people, ate with them, slept with them, husked corn with them, and was one of the people while he lived here. After he entered the state, he came down as far as the Little Red River. This is his introduction to Arkansas.

"I was already far enough advanced in English to be able to take part iu the conversation, the educated American being very indulgent to foreigners in this respect. We sat talking till about ten o'clock. The young wife had just received a letter from her husband, which she read through and through ten times over. She had been very unfortunate in Arkansas. The doctors had killed three of her children, and she herself was suffering from inflamed eyes through their ignorauce. The fact is that there is no sufficient authority to control their practice in these new states, and every quack who chooses may call himself doctor. They prescribe calomel for every disorder, and decayed teeth, inflamed eyes, spongy gums and shattered health are the universal consequences."

He came ou to Little Rock. The less I say about that the better, because I live there. But he came on through the woods till he came to the Red River, about where Fulton is now, I suppose, and crossed there and went into Texas. I have studied the maps and plans and specifications, and I find that under that spot, about as near as I can tell, where Dr. Kosminsky is now sitting in this hall, he first met the chief and then found a tribe of Indians on the hunt. They took him in and made him one of the tribe, and divided the hunt with him. So, that is the history of the hospitality of this locality long before the white man got this far.

The people of Texarkana on the Arkansas side cannot help being hospitable. I can prove that by a scientific law, Mendel's law. Mendel experimented on garden peas, and showed that certain characters of one parent appear in the hybrids of the first generation to the exclusion of the contrasting characters of the other parent. The former he called "dominant," and the latter "recessive." If I should say "recessional" hereafter, it is because I am accustomed to attending church. In successive generations the recessive characters appeared in the ratio of one recessive to one dominant. The recessive continued pure (RR). That is like the recesive parent. The dominant consisted of pure dominants (DD) and those which gave rise to mixed offspring (DR) in the ratio of one pure dominant to two of the latter. That is, N (DD) plus 2N (DR) plus N (RR). In general, whenever there occurs a pair of differential characters of which one is dominant and the other three possibilities exist, there are recessives which

always breed true to the recessive character, and there are dominants which breed true to the dominant character, and are therefore pure. And, thirdly, there are dominants which may be called impure, and which on self-fertilization —thank God, that doesn't prevail among the people in this particular part of the country—or, in breeding where the sexes are separated, give both dominant and recessive forms in the fixed proportion of three of the former (dominant) to one of the latter (recessive).

Now, applying that law to this city, and substituting A for Arkansas and T for Texas, I can prove that you cannot help being hospitable. In the days gone by, there came a man who had in him the blood of the Puritan and the Cavalier, and some French, and maybe, as he strayed through the United States in this direction, he might have imbibed or got into him in some ancestrial way a little Indian blood, of the Mohawks, say, those noble Redmen, and he met in this vicinity a maiden who had come from that ancient civilization of Peru and Mexico, and had some Spanish blood. They met in this vicinity. Each was so patriotic that neither would cross the line to make a home, but married on State Line Street and proceeded to populate this country. They lived on the line here or near here, and one, the dominant character, remained in Arkansas, and the other in Texas, on the line. Now, a line has no position, but just direction. So, nothing separated them but a line. They continued to multiply, and now it has gone on from generation to generation, three dominant Arkansans to one recessive Texans, until the Arkansas side is the most hospitable of all places when it comes to entertaining the Arkansas Medical Society. This formula has one advantage. I don't want to knock Texas, or say anything unkind about it. The formula, I say, has this advantage: If the Texas Medical Society ever meets in Texarkana, the gentleman who delivers the address can just transpose the formula and prove that Texas is the dominant and Arkansas the recessive. So, after all, it is a good rule and it works both ways.

But our friend Gerstaecker is already in Arkansas, and here is what he says (1840):

"Arkansas was overrun at this time with a number of drunkards, murderers, who all thought that the simple-minded backwoodsmen were easier to be cheated than the wary settlers in the older states. This circumstance had given so bad a name to Arkansas that many thought all its inhabitants went about armed to the teeth with pistols and bowie knives; but I have traversed the state in all directions, and met with as honest and upright people as are to be found in any other part of the Union."

And these are his parting lines (1841):

"We entered the Mississippi the second day and soon left the State of Arkansas far behind us. Of all I had seen in America, it was the one which pleased me most. I may perhaps never see it again, but I shall never forget the happy days I passed there where many a true heart beats under a coarse frock or leather hunting shirt."

That was Arkansas and this is Texarkana, true to the old traditions and old stock. We are glad to be with you a second time to join the tribe in our annual hunt for more scientific knowledge and to smoke the pipe of peace once again. (Applause.)

On motion of Dr. W. A. Snodgrass, the reading of the minutes was dispensed with, as the proceedings had been published in The Journal.

The president appointed as Reference Committee:

Drs. L. P. Gibson, St. Cloud Cooper and T. F. Kittrell.

REPORT OF COMMITTEE ON SCIENTIFIC PROGRAM.

Mr. President and Members of the Arkansas Medical Society:

Your Committee on Scientific Program wishes to report that it has prepared a program consisting of thirty-five papers, including those to be given at the public meeting.

We submit our work with the hope that the results will but show the wisdom of our combined judgment in reaching conclusions. If there be anything in the adjustment that invites criticism, we trust that you will pass lightly over the incongruities and take the will for the deed.

In constructing the program, we have limited the number of essays, as we feel that fewer papers and a general discussion is better than providing for a more liberal number of papers, which may force a limitation of the comment which the presentation should bring out. In this way we believe the meeting will prove more interesting and helpful.

Respectfully submitted,
WM. R. BATHURST, Chairman,
FRANK VINSONHALER,
C. P. MERIWETHER.

President: This will be referred to the Reference Committee.

REPORT OF COMMITTEE ON NECROLOGY.

Dr. R. H. T. Mann of Texarkana submitted partial report, reserving right to amend later when complete data was received from county secretaries who had failed to respond to inquiries.

Ernest Black Jones of Harrell died November 28, 1915.

Dr. W. P. George of Belleville, Ark., died October 14, 1915.

P. G. Noack of Bardstown died March 9, 1915.

A. A. McLendon of Marianna died July 24, 1915.

W. F. Baskerville of Booneville died May 6, 1915.

David A. Sims of Fort Smith, age 65, died of broncho-pneumonia, December 21, 1915.

E. K. Williams of Arkadelphia died September 10, 1914.

G. C. Abell of Miller County died April 11, 1915.

W. S. Stewart of Pine Bluff died at Hot Springs, May 31, 1915.

C. A. Smith of Texarkana died January 11, 1916.

REPORT OF COMMITTEE ON TRAINED NURSES.

To the President and Members of the State Medical Society:

Gentlemen—We, your Committee on Trained Nurses, beg leave to submit the following report:

In looking up the rules to ascertain just what are the duties of this committee, we were surprised to find that there is no provision for such permanent committee; that it has no excuse for existence, except that the action of the society intended for a single year has inadvertently been continued from year to year by each succeeding president. At the 1912 meeting when a movement had been started by some of the nurses of the state for the passage of a law providing for the examination and registration of nurses, a request was made for assistance from this society in aid of the enactment of such law, and a motion was made to instruct the Committee on Medical Legislation to render such assistance as was in its power. This motion was amended by providing for the appointment of a special committee of one (Dr. Ogden), who was authorized to call such others to his aid as he deemed proper. From this event seems to have arisen this committee.

Considering, however, that it is the province of the society, and not this committee, to determine as to whether law or precedent shall govern, we present the following report, and in the beginning want to acknowledge our indebtedness to Miss Menia S. Tye, R. N., superintendent of Sparks Memorial Hospital, Fort Smith, and president of the Arkansas State League of Nursing Education, for the data of this report.

We desire further to say that since the passage of the law providing for the examination and registration of nurses, the State Board of Education, together with the Board of Nurse Examiners, have adopted a code of rules providing certain requirements before a training school can be chartered, and a curriculum to be followed by them. This report does not attempt to cover all the training schools of the state, but only those which have been regularly chartered.

Dr. J. G. Eberle, Chairman, Training School Committee of Arkansas State Medical Association:

Sir—I beg leave to submit the following report on training schools and hospitals in the State of Arkansas. We have asked directly of the heads of the various hospitals for specific information of this kind, and from nearly all have received comprehensive replies, the gist of which I now give:

1. St. Vincent's Hospital at Little Rock—
Bed capacity, 200.
Has a chartered training school of 40 pupils.
Has a trained, graduate, registered nurse as principal of training school.
Previous experience as an executive 10 years.
Number of other trained, graduate, registered nurses employed in official capacity, 1.
Length of training school term, 2 years and 2 months.
Number of nurses graduated during 1915, 10.
Number of patients treated during 1915, 4,588.
Sister Martina, a registered nurse, is superintendent of the hospital.

2. City Hospital of Little Rock—
Bed capacity, 78, with 14 cots.
Has a chartered training school of 11 pupils.
Has a trained, graduate, registered nurse as principal of training school.
Number of nurses graduated during 1915, 3.
Length of training school term, 2 years.
Number of patients treated during 1915, 1,422.
Miss Viola Lee, a registered nurse, is superintendent of the hospital.

3. Pulaski County Hospital at Little Rock—
Bed capacity, 250.
Daily average, 190.
Has a chartered training school of 10 pupils.
Has a trained graduate, registered nurse as principal of training school.
Previous experience as an executive, 10 years.
Length of training school term, 2 years and 3 months.
Number of nurses graduated during 1915, 3.

Number of patients treated during 1915, 6,835.
Dr. J. P. Sheppard is superintendent of the hospital.

4. The Little Rock Sanitarium at Little Rock—
Bed capacity, 35, with 20 beds in annex and dormitory.
Daily average, 25.
Has a chartered training school of 20 pupils.
Has a trained, graduate, registered nurse as principal of training school.
Previous experience as an executive, 17 years.
Number of other trained, graduate, registered nurses employed in official capacity, 2.
Length of training school term, 2 years and 6 months.
Number of nurses graduated during 1915, 5.
Number of patients treated during 1915, 428.
Dr. W. C. Green is superintendent of the hospital.

5. State Hospital for Nervous Diseases at Little Rock—
In reply to your inquiry, Dr. E. F. Bledsoe says: "Regarding information concerning the training school, I would say that unfortunately the last Arkansas legislature saw fit to discontinue our appropriation for a training school in this institution. However, we hope that the next legislature will have an appropriation, and that we will resume our work along that line."

6. Sparks Memorial Hospital at Fort Smith—
Bed capacity, 100.
Daily average, 35.
Has a chartered training school of 20 pupils.
Has a trained, graduate, registered nurse as principal of training school.
Previous experience as an executive, 20 years.
Number of other trained, graduate, registered nurses employed in official capacity, 3.
Length of training school term, 2 years and 3 months.
Number of nurses graduated in 1915, 6.
Number of patients treated during 1915, 1,166.
Number of hospital days, 12,304.
Number of babies born in hospital, 29.
Miss Menia S. Tye, a registered nurse, is superintendent of the hospital.

7. St. Edward's Infirmary at Fort Smith—
Bed capacity, 30.
Has a chartered training school of 8 pupils.
Has a trained, graduate, registered nurse as principal of training school.
Previous experience as an executive in Mercy Hospital, Chicago.
Number of other trained, graduate, registered nurses employed in official capacity, 4.
Length of training school term, 2 years and 2 months.
Number of nurses graduated during 1915, 2.
Number of patients treated during 1915, 678.
Sister Agnes, a registered nurse, is superintendent of the hospital.

8. St. Joseph's Infirmary at Hot Springs—
Bed capacity, 60.
Daily average, 31.
Has a chartered training school of 14 pupils.
Has a trained, graduate, registered nurse as principal of training school.
Previous experience.
Number of other trained, graduate, registered nurses employed in official capacity, 4.
Length of training school term, 2 years and 2 months.
Number of nurses graduated during 1915, 3.
Number of patients treated during 1915, 1,131.
Sister Mary Edward, a registered nurse, is superintendent of the hospital.

9. The Leo N. Levi Memorial Hospital at Hot Springs—
Bed capacity, 50.
Has a chartered training school of 8 pupils.
Has a trained, graduate, registered nurse as principal of training school.
Previous experience as an executive, 8 years.
Length of training school term, 2 years and 3 months.
Number of patients treated during 1915 159.
Miss Regina H. Kaplan, a registered nurse, is superintendent of the hospital.

10. The City Hospital of Fayetteville—
Bed capacity, 30.
Daily average, 18.
Has a chartered training school of 9 pupils.
Has a trained, graduate, registered nurse as principal of training school.
Previous experience as an executive in St. Louis Children's Hospital.
Number of other trained, graduate, registered nurses employed in official capacity, 1.
Length of training school term, 2 years.
Number of nurses graduated during 1915, 2.
Number of patients treated during 1915, 298.
Miss Ruth Riley, a registered nurse, is superintendent of the hospital.

11. The Helena Hospital at Helena—
Bed capacity, 30.
Daily average, 12.
Has a chartered training school of 6 pupils.
Has a trained, graduate, registered nurse as principal of training school.
Previous experience as an executive, 9 years.
Length of training school term, 2 years.
Number of nurses graduated during 1915, 1.
Number of patients treated during 1915, 434.
Miss E. C. Balls, a registered nurse, is superintendent of the hospital.

12. The Crossett Hospital at Crossett—
Bed capacity, 25.
Daily average, 6 patients in hospital, 14 out of hospital.
Has a chartered training school of 3 pupils.
Has a trained, graduate, registered nurse as principal of training school.
Previous experience as an executive, 2 years.
Length of training school term, 2 years and 3 months.
Number of nurses graduated during 1915, 1.
Number of patients treated during 1915, 228.
Dr. Sparks is superintendent of the hospital.

13. The Davies Hospital at Pine Bluff—
Bed capacity, 85.
Daily average, 25.
Has a chartered training school of 14 pupils.
Has a trained, graduate, registered nurse as principal of training school.
Previous experience as an executive, 11 years.
Number of other trained, graduate, registered nurses employed in official capacity, 1.
Length of training school term, 3 years.
Number of patients treated during 1915, 450.
Miss Belle McKnight is superintendent of the hospital.

14. The Dale Sanatorium at Texarkana—
Bed capacity, 20.
Has a chartered training school of 4 pupils.
Has a trained, graduate, registered nurse as principal of training school.
Previous experience as an executive, 1 year.
Length of training school term, 2 years.
Number of nurses graduated during 1915, 2.
Number of patients treated during 1915, 400.
Dr. Dale is superintendent.

15. The Paragould Sanatorium at Paragould—
Bed capacity, 20.
Daily average, 9.
Has a chartered training school of 7 pupils.
Has a trained, graduate, registered nurse as principal of training school.
Previous experience as an executive, 6 years.
Number of other trained, graduate, registered nurses employed in official capacity, 1.
Length of training school term, 2 years and 3 months.
Number of nurses graduated during 1915, 3.
Number of patients treated during 1915, 268.
Dr. H. N. Dickson is superintendent of the hospital.

16. The Clark Sanitarium at Pine Bluff—
Bed capacity, 18.
Daily average, 10.
Has a chartered training school of 6 pupils.
Has a trained, graduate, registered nurse as principal of training school.
Number of other trained, graduate, registered nurses employed in official capacity, 1.
Length of training school term, 2 years.
Number of patients treated during 1915, 266.
Dr. O. W. Clark is superintendent of the hospital.

17. The Arkansas Tuberculosis Sanatorium at Booneville:
In reply to our inquiry, Dr. Stewart said: "When I took charge here, there was a supposed training school, but it was such a poor effort I discontinued it. The pupils were ex-patients. We have a bed capacity of 123; in three months we will have 150 beds. Daily average, 105. We have three trained, graduate, registered nurses employed. Patients treated during 1915, 256."
Dr. John Stewart is superintendent of the hospital.
The following hospitals we did not receive any direct response to our inquiries. But we quote from the second annual meeting of the Arkansas State Graduate Nurses' Association:
"The Florence Sanatorium at Pine Bluff has 5 pupil nurses in training."
There are other hospitals throughout the state without training schools, some of them employing graduate nurses.
At the present time there are 464 nurses registered by the State Board of Examiners.

COURSE OF STUDY RECOMMENDED BY THE COMMITTEE OF EXAMINERS FOR THE TRAINING SCHOOLS FOR NURSES IN ARKANSAS.

Recommendations to the Training Schools for Nurses in Arkansas.
In compliance with the request of the State Board of Education, the Arkansas Board of Nurse Examiners presented the following recommendations to the training schools for nurses in Arkansas, October, 1914.
It is expected that in its entirety it cannot be adapted to all schools, but it is hoped that it will aid them in planning and carrying out courses of study which shall give to Arkansas, nurses of whom she may be proud.
The Board of Examiners urges the training schools of Arkansas to select as superintendents and teachers only those who have had preparation which has especially fitted

them for these important positions. There should be a definite plan of class and lecture work, and time given for study. Great care should be shown in the selection of the text-books used.

Discrimination should also be exercised in the admission of pupil nurses to the schools; and there should be consideration of their morals, their scholastic attainments, general physique, their personality and general adaptability for the work. The pupil nurses should be properly housed, with special attention given to the conditions necessary for health, including sewerage, ventilation, heat, proper food and recreation, and nurses should be expected to attend the church of their choice at least bimonthly.

The board advocates as many classes and lectures as possible be held during the day, that nurses when not on duty in hospital may have the evenings for study and recreation. Nurses shall be encouraged to attend such places of entertainment as will broaden their horizon and better fit them for their chosen work, when such attendance does not interfere with their hospital duties or studies.

It is necessary that a complete record be kept of the pupil nurses in the schools in regard to their qualifications; their class and lecture work with standings; the practical work given them, and the time spent in each division, with an estimate of their ability and efficiency.

It is urged that three weeks each year should be allowed to the nurses for vacation.

The probationary period recommended by the board is three months. Formerly one month was considered sufficient, but many of the best schools have found that the added time is a great advantage over the shorter period. The probationer has an opportunity to better prove her fitness for the work, a longer time in which to receive her instruction before assuming the responsibility of actually caring for the sick, and the school has a better opportunity to judge her qualifications and adaptability. Should she desire to leave, or the school decide it is best that she should not remain, the embarrassment is less for all concerned than at the end of one month to be accepted and later to find that a mistake has been made.

The division of practical work has been made with a knowledge that it is impossible to fully plan on the exact amount of time which can be given to any division of the training, but it is urged that all the departments of work receive a fair amount of attention. The giving of too great responsibility for inexperienced nurses before they have been taught how to do the work, or what symptoms to expect under the existing conditions, is to be condemned; and it is urged that the nurses be given the greater part of their training with acute diseases in their second year.

Nurses should be instructed in regard to their own state laws relating to quarantine and the care of infectious and contagious diseases. The board would recommend that the schools ask the State Board of Health for literature in regard to these diseases and have it taught to their pupils.

Nurses should be taught the ethics of their profession during the entire course. Their duties to the profession, to all physicians, to their parents, and to the public, cannot be too greatly emphasized.

The Board of Examiners begs the hearty, faithful cooperation of all training schools for nurses in Arkansas in the effort that is being put forth to have more thorough preparation given to those who are taking upon themselves the responsibility of caring for the sick; and it also desires their endorsement of all measures which will aid in the prevention and cure of disease.

A curriculum of study is recommended, together with text-books.

Any training school for nurses, before graduating nurses, shall first secure a charter from the State Board of Education, and the school must be connected with a hospital or sanitarium having not less than sixteen beds for general patients. Each bed must meet the standard requirements for air, space and light. In addition, it is recommended that the school provide well-ventilated and well-lighted rooms with at least one thousand cubic feet of air space for each nurse. Said rooms should be above the basement or in a well-ventilated building contiguous to the hospital.

Each training school shall have a superintendent, who is a graduate nurse of practical and teaching experience. Such superintendent is required, even if the head of the institution be a man.

The period of instruction in the training school must be not less than two full years, during which time students will not take cases outside of the hospital. Training schools with a three years' course may send students out to private cases during part of the third year. The class term, at least eight months, written reviews every quarter and examinations at the end of each term or completion of any subject. Frequent demonstrations and illustrations should accompany the lectures and class work.

There shall be a minimum of six licensed physicians as a lecturing staff exclusive of the superintendent.

The hospital maintaining the school must have property valued at not less than $10,000.00 over and above indebtedness.

We recommend that nurses in training shall be allowed while on day duty in training, not less than two hours daily for recreation and study, and also five hours each Sunday; and we recommend that nurses be urged to attend divine services in the church of their choice at least twice in each month.

Respectfully submitted.
J. G. EBERLE, M. D.
J. D. SOUTHARD, M. D.

The report of the Committee on Legislation was next in order.

REPORT OF COMMITTEE ON LEGISLATION.

To the House of Delegates:

The secretary issued a call for a meeting of the committee to be held in Little Rock November 22, 1916, but on account of the unavoidable detention of one of the members and the inability of another to attend, no meeting was held. No further attempt has been made to hold a meeting.

Respectfully submitted,
MORGAN SMITH, Chairman.

President: The chairman of the committee is present. Have you any recommendations to make?

Morgan Smith of Little Rock: I have several that I have in my mind that I think would be worth recommending, but I could not consistently do it without the co-operation of the other members of the committee. Probably I might, as an individual member, submit later some suggestions which I might have in mind.

The report of the Committee on Public Health and Public Instruction was next in order.

F. B. Young of Little Rock: This committee has held no meetings. It has done nothing absolutely. I haven't even written a report to put in. And it will do nothing in the future; it never has done anything, and won't do anything in the future. I would suggest that the committee be abolished and not appointed in the future. Conditions in this state are such that, if a man should go out and try to make a public talk on anything, somebody would criticise him in the next meeting of his own county society. He is handicapped every way in the world. I have held two public positions, and I have been in private practice for sixteen years. I know what I am talking about. You can't do these things and get by the State of Arkansas. Consequently, I move that this committee be abolished and no other be appointed in its stead.

J. D. Southard of Fort Smith: I realize very forcibly the truth of what Dr. Young says in reference to the way a man is regarded by his brother practitioner who does public work, but I doubt the wisdom of abolishing this committee. This is a line of work that we certainly realize, all of us, is very greatly needed in the State of Arkansas, and I would prefer, if there was some way we could get at it, to not abolish the committee, but to make certain changes that would make it more useful and more practicable.

President: I don't believe the motion has been seconded.

Dr. Snodgrass: I second it.

Dr. Young: I want to say this, that I do believe that this committee, under the present conditions, will never do any good. I realize, as Dr. Southard does, that this is a very important committee, and ought to do a whole lot of work; but, when a man cannot get up in a public meeting and say a few things about public health without being criticised by some of the older members of the profession, and criticised publicly and in the medical societies, it is time for him to think about what they mean. They say that the chairman of this committee has used this position to advertise himself. I can see the man now, without turning my eyes, who said that. And those things don't go well. I have been very active in organized medicine for a good many years, and it may be that I have used organized medicine to advertise myself. I possibly have; I didn't intend to. It was my idea to try to do good; but I have been criticised most unmercifully for some things that I have done. Any other man that will be put in my position will be criticised by the man who has done the same thing in his younger days, when he was full of enthusiasm and wanted to do something. Consequently, I say, let's don't subject anybody else to the temptation to try to do something and get himself criticised and stepped on. Now, this is a constitutional committee;

I am well aware of that. The only thing we have to do to get around that is to pass a motion through here that the incoming president be instructed not to appoint any members of this committee. Now, if we are going to do anything, it's up to us to get in behind the men that are trying to do something, and help them instead of criticising them. Instead of trying to tear down, help to build up. Now, I say this in a kindly spirit, but I say it frankly and freely, and I say it the way I feel it, that the man who goes out as chairman of this committee in the next twelve months is going to subject himself to criticism if he does anything, and, if he doesn't do anything, he is going to be laughed at when he comes up here. I say this knowingly, and out of my own personal experience. I will make another motion, in order to get at it, and, with that explanation that I have made, I move you that the incoming president be requested not to appoint any members of this committee.

R. C. Dorr of Batesville: I second it.

L. Kirby of Harrison: I am not in favor of tying the hands of the incoming president.

Motion lost.

President: I would suggest, for Dr. Young's satisfaction, that every man who does his duty will be criticised in any community.

Dr. Young: Unfortunately, I didn't do my duty.

The next order of business was the report of the Committee on Memorial Tablet of the late Dr. John S. Shibley.

Dr. Gibson of Little Rock: The committee have had a monument made by the Gorham Manufacturing Company of New York, and it was shipped to Booneville in time to have been placed long before this meeting, and I wrote to the superintendent of the sanitarium to have it placed—it can be done by an ordinary carpenter—and send me the bill of expenses. So far I haven't heard from him; I expect to hear from him soon.

Dr. Young: I have had two motions lost. I think the third one will possibly be a winner. I move that this committee, that has this work in charge, be requested to notify the medical profession of Arkansas when this tablet will be unveiled, so as to make a public ceremony out of it in honor of Dr. Shibley. I consider that Dr. Shibley is one of the greatest men that Arkansas has ever produced, and I consider that his work there is entitled to public recognition, and I hope the medical profession will be sufficiently interested to come out in large numbers when this tablet is unveiled, and I move, for that reason, that this committee be requested to notify all the members of the Arkansas Medical Society the time of the formal unveiling of the tablet.

Seconded. Carried.

REPORT OF COMMITTEE ON FIRST AID.

Dr. C. P. Meriwether, Secretary Arkansas Medical Society, Little Rock, Ark.:

Dear Doctor—I am in receipt of your letter of April 15, advising me that as chairman of the Committee on First Aid, my report would be due the House of Delegates on the morning of May 2, 1916, at Texarkana.

In reply to this letter, beg to advise that in 1911 I accompanied Dr. Shields, who was lecturing on "First Aid" at different division points on the Rock Island system, to Little Rock and had him lecture to the employes of the Rock Island Railway Company at Argenta. My instructions to my division surgeons, at that time Drs. Runyan and Shinault, were to organize a class and teach them "first aid." Neither of these gentlemen were able to interest the employes in "first aid" at all.

At the time I was transferred to Little Rock by the Rock Island Railway Company in 1913, I had the superintendent, then Mr. A. B. Copley, place a car at the Rock Island depot and advertise at the shops in Biddle and Argenta that I would lecture to the class on "First Aid" Wednesday nights of each week at 6 p. m. I was never able at any time to interest the employes of this company sufficiently to have them attend these lectures.

Owing to the fact that I will not be able to attend the state meeting at Texarkana, on account of attending suits against this company, I am writing you this report.

Yours truly,

E. N. ALLEN, Chairman.

REPORT OF DELEGATES TO THE 1915 SESSION OF THE AMERICAN MEDICAL ASSOCIATION.

(By Robert Caldwell, Little Rock.)

One has only to attend the meeting of the American Medical Association as a delegate to be able to appreciate the great work of that organization. One wonders how men whose time is so valuable can take the trouble to do the investigation and produce such reports as are given. Surely these men have altruistic motives. A new delegate can only sit in amazement at the wonderful efficiency of this great organization, and drink in the proceedings, feeling content to say nothing, and be glad he can vote.

Will say I have never been in another city of any note where as much respect is shown the medical profession as San Francisco, and I was led to believe it was due to the wonderful efficiency and altruistic motives of the physicians after the earthquake.

I wish I had time to go through this book of proceedings and take up the different subjects, as the report of the Council on Chemistry and Pharmacy; report of the Judicial Council especially on workmen's compensation laws, a wonderful field; report of the Council on Health and Public Instruction, taking up present public health conditions, and especially public education; the report of the Committee on Medical Education, which has all been printed in The Journal, and but very few of you have read.

As a delegate at San Francisco, I seemed to know so little and to be able to take such little part in the active proceedings that I wondered if it were worth while for me to be there. We need delegates that are acquainted with the work, and men who are in touch with the situation and are willing to follow the legislative proceeding of the A. M. A.

I fully realize that this is an honorary position, and we like to pass it around; but, as I see it, our first object should be the good of the people and the profession, which we can hardly expect if we are changing delegates every year. Usually we will have only one delegate present, as in 1914 and 1915, and in all probability he will not be acquainted with the work.

It has been the custom of the Arkansas Medical Society to retain a secretary for a period of years, and the state secretary is in a position to show more as regards medical subjects in their relation to association work than most of us.

I would advise that this House of Delegates start the custom of electing the secretary a delegate to the meeting of the A. M. A., and I am sure that when the membership of the society realizes the strength that the delegate gives from year to year, it will see the wisdom of following this suggestion.

Having been a member of the House of Delegates, I can truthfully say that if one discharges his duty as a delegate he can take no part in the scientific meeting, and so far as personal benefit is concerned, he can accomplish nothing.

The House of Delegates is a legislative body, and the longer one man is a member of any legislative body, the more his power grows. Further than this, it is a custom in a great majority of the states to elect the secretary as one of the delegates to the meeting of the A. M. A. and to pay his expenses. In view of these facts, I suggest that this House of Delegates select the secretary-elect as one of the delegates to the next meeting of the A. M. A. and hope to see the custom become permanently established.

REPORT OF COMMITTEE ON ARRANGEMENTS.

Dr. Mann:

A number of years ago the Arkansas Medical Society came to Texarkana, and, unfortunately for us, the hotel accommodations at that time were not what they should have been; probably it was due to a little misunderstanding. But this time we have done our best to make it so that every physician attending can get suitable accommodations and can be well provided for while in Texarkana. I want to say that if you failed to get a room that suits you, or if your accommodations are not pleasant to you, we want you to come to us, to the members of this committee—myself, Dr. Hunt, Dr. Kosminsky and Dr. Kelly—and make your complaints known now, because we want you to be satisfied, gentlemen. We want to do all we can in Texarkana to entertain you this time, and, if the noise is too great down at the hotel, we will provide you a place out in town where it will be quiet for you. If the attendance is so large that you can't get accommodations in the hotel, we are going to take you in our homes and see that you are provided for, and I believe, if you still can't be accommodated, we will get out and give you our homes for a few days in order that you may be accommodated. (Applause.)

If there is anything we can do to make your stay pleasant and agreeable, if you are not quite satisfied, come and make your wants known and we will do all we can to make it pleasant for you. We are very glad to have you with us. (Applause.)

REPORT OF THE COUNCIL.

Dr. Snodgrass:

The society seems to have been getting along harmoniously this year. There has been nothing referred to the Council; there has been no action taken since the last meeting, and the Council has not had a meeting. The Journal seems to be running in good order, and that is our principal duty, to supervise The Journal. But, so long as we have as able an editor as we have now, it will not be necessary for us to worry with that very much. I would like to have a meeting of the Council as soon as this meeting closes, so that we can take up a little matter that was referred to me as chairman of the Council, that we will bring out in the next report.

REPORT OF THE SECRETARY.

1915-1916.

To the President and Members of the House of Delegates of the Arkansas Medical Society:

In compliance with the Constitution and By-laws of this society, I beg leave to submit the following report:

There still exist four counties in which we have never been able to organize a county society, namely: Van Buren, Stone, Newton and Scott.

Four years ago we placed in the field a state organizer. He succeeded in organizing societies in Fulton, Izard, Sharp, Pike, Marion, Madison and Crittenden Counties, all of which lapsed their membership after the first year, except Pike, Madison and Crittenden. Pike has failed to pay its dues for 1916. In addition to the above counties, Cleburne, Cross, Desha, Garland-Hot Spring, Jefferson, Montgomery, Prairie, Pike, Randolph and St. Francis have failed to make any report for 1916. They had a membership last year of 156.

The last report gave you a membership of 948; this year we have a membership of 830, showing a loss of 118 members over our last annual report, which shows a healthy increase over our membership of a year ago, when the number of counties which have this year failed to pay their dues are taken into consideration, and I feel almost certain that the counties who have failed to make their report, with the possible exception of one or two very small ones, will send in their dues before this report is read.

From the best information obtainable by your secretary, I do not believe there is sufficient interest being manifested in the meetings of the county societies. A great many of them have failed to meet for months; others meet two or three times a year, when most convenient for the membership. There does not seem to be a sufficient amount of interest taken by the Council as a whole, to keep in touch with the county organizations. Some of the councilors, no doubt, have done good work. Every councilor district, with the exception of the Ninth, has lost membership in the last year; and the Ninth has made neither gain nor loss, but has the same number that they had last year.

I think one of the biggest questions that confronts our society at this meeting is, how best to arouse enthusiasm in the county organizations? The county societies are not interesting or entertaining to their members.

The county secretaries have been slow in making their reports this year. It might possibly have been due to the fact that I wrote them a letter in December, asking them to hold their reports as long as possible, in order that it might be complete before sending it in, but I tried to impress upon them that it should be sent in not later than March 1. My records will show that about six counties made a report prior to March 1. Some of them, as you will notice from the above, are still holding out.

One unfortunate thing with the majority of the counties is that they change their secretaries practically every year. During the latter part of November it is my custom to send to each county secretary a full supply of blanks for their annual report. This usually reaches them from one week to ten days prior to the meeting at which they are supposed to hold their annual election of officers. Some of the societies hold their election, others do not meet. As a result, the old secretary throws away or mislays his blanks, or does not turn them over to the new secretary-elect; and then the new secretary, four or five weeks prior to the annual meeting, writes me to send him the necessary blanks and instructions for making his report. So, it seems to me, that something must be done to arouse more interest in our county organizations.

Your state secretary should not issue more than from sixty-five to seventy-five receipts in a year. This year, or since our last annual meeting, I have issued practically 250; and were I to show you some of the reports as made, you would hardly know to what they had reference.

Now, this is not in a spirit of criticism, but I am saying it to you for the best interest of organized medicine. I am not complaining of the extra amount of work that this places upon me, but of the liability to make an error.

So, if each delegate who is in attendance at this meeting would take the necessary interest to devote fifteen or twenty minutes at the first meeting of their county society after returning home, to talking organization to the members of his society, I believe it would be of great benefit. Try to elect to your secretaryship the most active and enthusiastic member of your organization, for the county society will positively amount to nothing unless you have a good, active secretary.

While our membership is slightly below par, and while we only reported 948 members in our last annual report, we had a few over 1,100 members on December 31. So, you see that quite a number paid their dues after the annual meeting last year; and while our report at this time shows only 118 short of last year, I am confident that we will get up near to our 1,100 mark before the year is over.

I believe that every member of the Arkansas Medical Society will be proud of its financial condition. We had on hand at our last report $4,761.01 vouchers drawn on the treasury since our last meeting, which includes the entire expense for running the society and Journal, $3,368.58, leaving a balance in the treasury of $1,392.43. We have received from dues since last report $2,317.50. Received from the editor, which are receipts from advertisements and subscriptions, $1,624.95, making a balance on hand at this meeting of $5,434.88. Faulkner County, however, overpaid their dues to the state society $6.00, which leaves a net balance of $5,428.88, and all bills are paid, with the exception of a bill to Mr. Overton as stenographer at the last annual meeting, $52.60.

Since writing this report two counties have paid their dues—Jefferson with a membership of 26, and Garland with 71.

Very respectfully submitted,
C. P. MERIWETHER, Secretary.

REPORT OF THE TREASURER.

(Wm. R. Bathurst, Little Rock.)

To the President and Members of the House of Delegates of the Arkansas Medical Society:

I wish to make the following report, from May 6, 1915, to May 2, 1916:

RECEIPTS.

Balance on hand		$1,030.34
From secretary, May 10, 1915		3,730.67
		$4,761.01

DISBURSEMENTS.

(Per list attached)		$3,368.58
Balance on hand		1,392.43
		$4,761.01

DISBURSEMENTS, 1915.

Voucher No. 389.	Wm. R. Bathurst	$ 683.19
Voucher No. 390.	C. P. Meriwether	593.75
Voucher No. 391.	J. T. Clegg	20.00
Voucher No. 392.	C. A. Archer	10.00
Voucher No. 393.	W. A. Snodgrass	62.04
Voucher No. 394.	L. T. Evans	6.00
Voucher No. 395.	H. L. Norwood	100.00
Voucher No. 396.	F. F. Simpson	50.00
Voucher No. 397.	Central Printing Co.	116.06
Voucher No. 398.	Thos. Douglas	50.00
Voucher No. 399.	Spott & Jefferson	25.00
Voucher No. 401.	Southern Trust Co.	7.50
Voucher No. 402.	Central Printing Co.	42.90
Voucher No. 403.	Wm. R. Bathurst	5.00
Voucher No. 404.	Central Printing Co.	183.16
Voucher No. 405.	Noel Loeb	22.00
Voucher No. 406.	Central Printing Co.	121.70
Voucher No. 407.	Wm. R. Bathurst	10.00
Voucher No. 408.	Central Printing Co.	158.46
Voucher No. 409.	Central Printing Co.	125.08
Voucher No. 410.	Central Printing Co.	106.65
Voucher No. 411.	Parkin-Longley Co.	1.45
Voucher No. 412.	L. C. Smith & Bros. Typewriter Co.	3.50
Voucher No. 413.	Wm. R. Bathurst	10.00
Voucher No. 414.	Central Printing Co.	105.05
Voucher No. 415.	Central Printing Co.	142.95
Voucher No. 416.	Central Printing Co.	118.00
Voucher No. 417.	Wm. R. Bathurst	10.00
Voucher No. 418.	Central Printing Co.	130.15
Voucher No. 419.	Dr. Frank B. Young	30.00
Voucher No. 421.	Central Printing Co.	146.60
Voucher No. 484.	Dr. J. E. Sparks	45.75
Voucher No. 422.	Central Printing Co.	126.64
		$3,368.58

Secretary: I have a communication from the doctors that are employed in the United States Indian Service. They are subject to and under the control of the Interior Department, and are unable to do anything in the way of sanitary or any other line of work, except under the direct supervision of the superintendents of the various agencies, who are laymen. Now, they are calling on all the various state socie-

ties, asking them to memorialize Congress and their congressmen to take them out of the Interior Department and place them under the supervision of the United States Public Health Service, which, in my opinion, is one of the best things that could possibly happen.

On motion of Dr. Kirby, seconded by Dr. Young, it was agreed that the House of Delegates, for the Arkansas Medical Society, recommend that their request be granted.

The following members were selected to act as the Nominating Committee:

First Councilor District—J. F. Sanders, Blytheville, Mississippi County.

Second Councilor District—J. C. Clevaland, Bald Knab, White County.

Third Councilor District—S. A. Southall, Lonoke, Lonoke County.

Fourth Councilor District—J. M. Lemons, Pine Bluff, Jefferson County.

Fifth Councilor District—F. C. Mahoney, El Dorado, Union County.

Sixth Councilor District—Don Smith, Hope, Hempstead County.

Seventh Councilor District—John S. Wood, Hot Springs, Garland County.

Eighth Councilor District—Robert Caldwell, Little Rock, Pulaski County.

Ninth Councilor District—L. Kirby, Harrison, Boone County.

Tenth Councilor District—J. D. Southard, Fort Smith, Sebastian County.

Dr. Kittrell: There seems to be some confusion as to whether a certain motion was passed or not; whether or not a man from the city in which the meeting was held would be eligible to the presidency of the society. We would like instructions from the Nominating Committee.

President: With the permission of the House of Delegates, I will rule that this has been passed on in the 1905 proceedings and settled.

Dr. Kittrell: In what way?

President: It was negative; voted down.

Dr. Norwood: I don't think you made your ruling clear to the house.

President: The question was brought up in 1904 and carried over to 1905. At that time it was voted on, and ruled by the president that it was an amendment to the constitution, and he ruled that it didn't have a two-thirds majority, and that it was lost, and that is the status today. So, it does not apply.

Dr. Southard: Is the result of that ruling to the effect, therefore, that a man in the town where the meeting is held is not eligible?

President: No. He is eligible.

On motion of Dr. Norwood, the House of Delegates adjourned until the next day, Wednesday, May 3, 1916, at 8:30 o'clock a. m.

HOUSE OF DELEGATES—SECOND DAY.

WEDNESDAY, MAY 3, 1916, 9:00 A. M.

The House of Delegates was called to order by the president, there being a quorum on roll call.

REPORT OF THE COUNCIL.

The committee from the Council audited the secretary's and treasurer's accounts and found them correct, as per statements attached.

The Council allowed the following bills:

Wm. R. Bathurst, as per vouchers	$ 31.85
C. P. Meriwether, as per vouchers	65.85
W. A. Snodgrass, as per vouchers	18.45
H. H. Rightor as per vouchers	3.00
L. T. Evans, as per vouchers	10.00
Secretary's stenographer	125.00
Editor's stenographer	125.00
C. P. Meriwether, secretary	500.00
Wm. R. Bathurst, editor	500.00

We find that all of the accounts and checks drawn on the bank have been correctly kept. We commend to the society the efficiency, economy and untiring efforts of the secretary and the treasurer-editor in the way the financial affairs of the society have been conducted.

We, the Council, recommend that the society carry its surplus as a time deposit in some bank.

We find that the expenses of the society will be twenty-five per cent greater in publishing The Journal for the incoming year than it has been in the past, owing to the increased cost of paper and printing.

Respectfully submitted,
W. A. SNODGRASS, Chairman,
H. H. RIGHTOR,
C. A. ARCHER,
L. KIRBY,
J. T. CLEGG,
J. B. CRAWFORD.

On motion of W. T. McCurry of Little Rock, the report was accepted.

COMMITTEE ON CANCER RESEARCH.

Dr. Snodgrass: Dr. Ogden, the chairman, is not here. The committee had a meeting, but we were in doubt as to what our duties would be in connection with this subject, so we got up the following report. If anybody has any advice to give us, we would like to know what it is. We expect to continue the committee.

To the President and Members of the Arkansas Medical Society:

We, your Committee on Cancer Research, beg to make the following recommendation:

That the president, each year, appoint a Committee on Cancer Research to co-operate with the American Society for the Control of Cancer.

That the committee send to the various women's clubs of this state appropriate literature furnished by the American Society for the Control of Cancer, and offer to furnish, if possible, a speaker to address them on the subject of cancer at some regular meeting.

That the committee be permitted to expend of the funds of this society a sufficient amount to cover the cost of postage, literature, pamphlets, and similar incidentals.

M. D. OGDEN, Chairman,
H. H. KIRBY.
WM. A. SNODGRASS.

On motion of W. R. Bathurst, the report was accepted.

Dr. Kirby: The other motion (referring to report of the Council) was that the report be received, but the recommendations of the Council were not approved. I move that the recommendations in that report be approved and adopted as the sense of this House of Delegates.

Seconded. Carried.

The secretary read a communication from the Medical Society of New Jersey.

New Brunswick, N. J., April 27, 1916.

C. P. Meriwether, M. D., Secretary:

Dear Doctor—The Medical Society of New Jersey sends greetings to the members of the Arkansas Medical Society, announcing that our society will celebrate its 150th anniversary at Asbury Park, N. J., June 20-22, 1916. As ours is the oldest State Medical Society in the country, we shall observe this occasion with more than ordinary enthusiasm, and we invite the president of your society, who will be elected at your coming meeting in May, to attend as our guest this meeting. Will you kindly inform me as to his name and address, when a formal invitation will be sent to him. Wishing you a very pleasant and profitable session of your society, I am, in behalf of our society,

Yours cordially,
D. C. ENGLISH,
Chairman of Committee of Arrangements.

On motion of Earl H. Hunt, the communication was received and filed.

Dr. Caldwell submitted the following:

Whereas, Experience has demonstrated that matters of great importance to the medical profession and the public have not received their just consideration because of the unbusinesslike way and indifferent method in which reports of committees are made; and,

Whereas, To enable a more intelligent discussion of the reports of said committees; therefore, be it

Resolved, That the chairman of each of the standing and special committees be required to furnish the secretary of this society a copy of said reports one month in advance of the next regular meeting, and that the said reports be published and a copy of the same be sent to the members of this society at least two weeks in advance of the next regular meeting.

Secretary: The secretary of the Arkansas Medical Society seriously objects to one provision in there,

and that is that they be sent to each member of the Arkansas Medical Society a month in advance of the meeting. If that is sent individually to each member, that means an expense of about fifty dollars to do it. Why not let that be published in The Journal a month prior to the annual meeting? It will put an unnecessary amount of work on your secretary, if that is sent to each member.

Dr. Kirby: The Committee on Necrology could not make a report one month prior to the meeting. They could make a partial one.

Dr. Caldwell: If it would be required, that could be taken care of by the committee. Dr. Meriwether's suggestion is a good one, because he could not hardly send them to each member of the society. I would like to change the motion so that this report could be changed, and also including Dr. Kirby's suggestions, if I get a second.

President: That will be referred to the Reference Committee.

Dr. Caldwell: I have another resolution. There has been a question whether we should ask anything of the legislature this time or not:

Whereas, A considerable percentage of blindness is caused from gonorrheal infection which is easily preventable; and,

Whereas, It is in the interests of humanity and conservation of state economics to prevent all unnecessary blindness; therefore, be it

Resolved, That the Legislative Committee be instructed to prepare a bill which shall require all physicians, midwives or other persons attending women in confinement to instill two drops of two per cent solution of nitrate of silver into the eyes of each infant delivered, and that a sufficient penalty be imposed for the failure so to do.

President: We will refer it to the Reference Committee, if there is no discussion.

Dr. Caldwell: I was asked to introduce another resolution:

Whereas, The medical practice act provides for examinations for licensure to be held in May and November of each year; and,

Whereas, The meeting in May is held just before the close of nearly all medical schools, and the meeting in November six months after their close; and,

Whereas, On account of this state of affairs, many graduates and candidates for licenses are greatly inconvenienced and delayed thereby; therefore, be it

Resolved, That the Legislative Committee be instructed to prepare a bill amendatory of the present medical practice act, providing for meetings to be held on the second Tuesday of July and January of each year, and to urge its passage by the next General Assembly.

President: This resolution will be referred to the Reference Committee.

President: On behalf of the Arkansas Medical Society, we want to welcome all the visitors from Texas and Oklahoma or elsewhere who may be here, and extend them the courtesies of the sessions, and would be glad to have them stand up and give their names to the secretary.

The following gave their names:

From Oklahoma—F. H. Clarke, Reno.

From Texas—H. R. Smith, Detroit; H. E. Chandler, Winfield; E. N. Gatlin, Redwater; W. C. Crutcher, Mt. Vernon; W. J. Johnson, Cookville; C. L. Gregory, and Will Cantrell, Greenville; R. C. Farrier, Omaha; E. A. Luck, Wolf City; Thos. B. Dorris, Grapevine.

On motion, the House of Delegates adjourned.

MEETING OF THE COUNCIL.

TUESDAY, MAY 2, 1916, 1:30 P. M.

Present: W. A. Snodgrass, chairman, Eighth Councilor District; H. H. Rightor, Third Councilor District; C. A. Archer, Sixth Councilor District; J. B. Crawford, Seventh Councilor District; L. Kirby, Ninth Councilor District; J. T. Clegg, Tenth Councilor District.

Dr. Snodgrass: I don't know of anything to come before the Council except the auditing of the reports of the secretary and treasurer, and the matter of publishing an essay read at the meeting last year. I have that paper, if you care to examine it. We are to decide whether we want The Journal to publish it. It has been referred to me, as chairman of the Council.

Dr. Clegg: All the councilors have seen the paper, or heard it read.

Dr. Archer: I am willing to cut it out. I move that we decline to publish the paper.

Seconded. Carried.

The chair appointed as committee to audit the reports of the secretary and treasurer, Drs. Archer, Kirby, Clegg and Rightor.

Adjourned.

GENERAL SESSION.

TUESDAY, MAY 2, 1916, 2:00 P. M.

Dr. J. C. Wallis, president, called the General Session to order.

Invocation by Rev. F. E. Maddox:

In all our ways and all our affairs, we would acknowledge Thee, O God, because Thou art the source of our life, of our blessings, of our wisdom, of our inspiration. We lift our eyes unto Thee at this hour for guidance in all that we do, in all that we say. We bless Thee for this fine body of men, who have come to our city representing the large interests which they do, and standing so close to the welfare of humanity. We thank Thee for their patience, for their fidelity, for their cleanliness of character, for their consummate skill, for the way in which they go in and out among the people, in sitting as they do by the bedside both of sickness and of death, and in the hours of sorrow how tenderly they minister to the needs of men and women. Now, guide them in all the deliberations of this convention, and may each one bring his contribution to this great work, and may light be thrown upon the great problems with which they deal, and may every one go from this place and from this hour with a larger vision of the needs of humanity and of the skill which they should bring to its administration. Hear us in this our prayer, and forgive our sins; lead us by Thy spirit and keep us ever under the shadow of Thy wings, through Jesus Christ, our Lord. Amen.

President: The mayor, Mr. Sanderson, is unavoidably absent, and I will ask Dr. Fletcher to take his place.

Rev. P. C. Fletcher:

Gentlemen—I am not going to deliver to you this afternoon an address of welcome, but, in behalf of the splendid mayor of Texarkana, Ark., I am going to speak to you a few words about him. I know it is a source of regret on your part that the honorable mayor cannot be present. I don't know just what Mr. Sanderson would say to you if he were here; but, knowing him as I do, a gentleman of large vision, of broad intellect, and of warm heart, I am very confident that he would do his best to make you feel very welcome to our city.

You know I am somewhat embarrassed. Just a few hours ago I met with the gentlemen over in Arkansas, and now I am meeting you in Texas. I feel very much at home in the presence of good physicians. The very first memory of my life was that that brought before my vision two faces—the one was the face of my mother, the other the face of the good family doctor. And, maybe I am adding this to the memory, but I think I can remember the doctor saying to my mother, "This is a very small baby." (I only weighed four pounds.) "In all probability this baby will never be raised." But that dear old doctor was not only a great physician, but a great saint. You don't often find saintliness among doctors! That is a matter of pleasantry, however. I don't know that I have ever known of a body of men that come nearer to being real ministers of Jesus Christ than the good physicians.

There are a great many things that we might welcome you to in Texarkana, one of which is not our streets. But we have a number of distinctive and unique features. I don't believe that there is another city the size of Texarkana on the American continent that has a skyscraper on a dirt road. We have it.

I was very much amused at an epitaph I saw on a tombstone in one of the graveyards in one of the older states. After giving the name of the gentleman, the date of his birth, etc., it said:

"Here lies the body of Samuel Proctor,
Who lived and died without a doctor."

I went to bury a gentleman once, a man whose family and himself belonged to an obscure life, and I met a little boy at the gate, and I said to the little fellow, "Who is your father's doctor?" He said, "He didn't have none. He just died of hisse'f." So, there are many witty things said about the doctors by way of pleasantry.

But, O, gentlemen, God Almighty has put into your hands one of the very greatest trusts that could possibly be committed to mortal man, that of being evangels of Eden, and I don't know that I have ever been nearer the gates of heaven than I have been when in the presence of the good family physician.

As I look out over this audience this afternoon, I see many doctors that I know. I might call you by name. There is Dr. Brooksher. Since I first knew him, his hair has become white. I knew him twenty-two years ago, when he was a young, dapper fellow; still dapper, but no longer young. He helped raise me.

I look out over this crowd again, and I see other men, as Dr. Southard, who just about a year afterward took charge of me, and still I am alive! I find Dr. Norwood. He never had a shot at me; but I had a shot at his table. I have enjoyed the hospitality of his home over here at Lockesburg.

So, gentlemen, if there is anybody on earth who ought to love the doctor, it is the man who is addressing you on behalf of the honorable mayor. You are many times welcome to Texarkana.

A man was going through a woodland of the Ozarks, walking along a trial, and he saw a log lying across his path. He saw the log move, and that attracted his attention. He got up to the log, and still it moved, and that aroused his curiosity, and upon examining the log closely he saw that it was a hollow log, and the thing was so full of coons that when the coons breathed, the log would expand and contract. Now, that is the type of Texarkana hospitality. It is just as full of it as that log was of coons. I thank you.

ADDRESS OF WELCOME BY L. J. KOSMINSKY, PRESIDENT OF THE MILLER COUNTY MEDICAL SOCIETY.

Dr. Kosminsky:

Mr. President, Members of the Arkansas Medical Society, Ladies and Gentlemen:

In speaking of epitaphs and gravestones, I feel like the little negro who was standing outside of a cabin door one day. A man came along, and he said, "What are you doing here?" He said, "Pa's dead inside thar. I'se standing out heah." "Why don't you go in?" He said, "Oh, I'se out heah. I'se the crepe." I am just like the little negro. I feel like a fringe of "crepe" following such a fine address of welcome.

It is indeed an honor to have the pleasure of welcoming you to our city in behalf of the Miller County Medical Society, the medical profession of our twin cities, and the community at large. We indeed feel proud to have such a distinguished body of men as our guests. I feel that it is useless for me to endeavor to illustrate to such an intelligent body the position our profession holds in the service it may render to society.

Though I am young in my professional career, it has ever been a pleasure to meet with this society, and my absence at its annual gatherings is greatly regretted by me, since so fully do I realize what a loss it means. The friendship and close association with its members, and, in particular, some of its old members, has been a great stimulus to me, and no doubt to many others.

As you have been so warmly welcomed by the representatives of our mayor, it leaves for me but to welcome you on behalf of the medical brethren of our city, and I sincerely trust when the meeting of 1916 closes you will be glad that our city was chosen as your meeting place. Especially do I wish this to be true, remembering that our medical society so earnestly extended you the invitation last year and won out over the fair city of Fort Smith. We trust that in the near future you will be glad to return. Our doors are open to you and yours, and if you do not see what you want, make your wants known to any member of the profession and, if possible, your desires will be fulfilled.

RESPONSE TO THE ADDRESS OF WELCOME ON BEHALF OF THE ARKANSAS MEDICAL SOCIETY, BY DON SMITH, HOPE.

Mr. Chairman, Gentlemen of the Miller County Medical Society, Ladies and Gentlemen:

On entering the hall I was walking with my friend Kosminsky. He remarked to me that he had to make an address this afternoon, and he said, "I wish you would feel my pulse." I took his blood pressure. It was around 221. I feel myself like my blood pressure, if registered, would be about 220.

At a recent meeting of an association of some kind in Mississippi County—I think probably it was the Fair Association—among others present at this meeting were some farmers who had been invited in. They wanted to get the expressions from these farmers, and how they felt about the fair, its educational features, etc. After the high-collared gentry had spoken, they called upon one old farmer, and introduced him, paid him quite a compliment as one of the best corn raisers in Mississippi County. The old gentleman arose and began his speech in about this manner: "I thank the gentleman very kindly for the compliment he put to me on the start on. Now, while you was speaking, I was listening, and while I was listening my ears were keen."

While I was listening to these addresses of welcome my ears were keen, too. Keen to the appreciation of the fact that I believe the words used in welcome were really genuine. Now, we are going to accept them as genuine for more reasons than one. In the first place, your reputation for hospitality has extended beyond your city limits many, many miles. We know we are welcome to your city, because you have here some of the best blood of the Old South, and that blood always knew how to entertain. You also have in some of your citizens some of the best blood of the North. And whenever the North and the South mix, no matter what the issue may be, there is always something good.

Now, we know we are welcome for another reason. This body of men have turned this year toward Texarkana, the gate city of the Southwest, to discuss measures which affect every man, woman and child in your city, and dull, indeed, would be the intellect of any city that would not welcome such a body of men.

Now, ladies and gentlemen, we are glad to come; we are glad to be with you, because you have some people here that we are proud of as citizens of our state. You have men outside of the profession that are an honor to the State of Arkansas.

I am going to mention one man outside of the profession; there are many others, but I am going to mention one. A few years ago, when Miller County swung into the "wet" column, as we call it, there was a young man in your city who happened to be county judge. When the men who wished to sell whiskey applied for license, this young man said, "No; I will not grant it." Now, I refuse to believe that he has dug his political grave, if he had political aspirations. But, if he has, I say this to you, that the noblest men and the bravest women in your city will see that his grave is kept green. (Applause.)

Now, you have some members in your city who are an honor to the city and the state. You have some general practitioners, the every-day sort of doctor, the family physician, who, if you will get behind them with your moral and your financial support, will bring you results. I don't know anything about the sanitary condition of your city, but, if it is ideal, I will say to you that it is the only one I know of either North or South. If you will cooperate with these men, they will make your city one of the healthiest in the South.

Now, you have heard of the Panama Canal. You have heard of the Culebra Cut, the Gatun Dam, and the many difficulties encountered there. You thought that it was a wonderful feat that the engineers performed on the Isthmus of Panama, and, indeed, it was. But it probably didn't occur to some of you that the man who made it possible to build that canal was a plain doctor named Gorgas. He came ahead of the men who built the canal, and, with the money and kerosene furnished by the government, he used his own common sense and made possible a project which had been abandoned by the French perhaps a hundred years ago, on account of the death of the men in that service. Now, that is the man who made it feasible to build that canal. Now, you have good men in your city; they may not be as great as Gorgas, but if they are assured of your hearty sympathy and support, they will make your city one of the healthiest in the South.

Now, gentlemen, you have other men, physicians and surgeons, whom it is our pleasure to know, and we consider it an honor that they are members of our society. You have one man in your city whom I will designate as the pioneer surgeon of Southwest Arkansas. He began surgery thirty years ago in the little city of Arkadelphia, when I was but a small boy. That's my home county. He began surgery under the most peculiar disadvantages, and yet he has made a success. I refer to that prince of gentlemen, Dr. J. R. Dale. (Applause.)

Now, you have some specialists, gentlemen, in your city that we are proud of, men in all the lines, but I shall not mention them because my personal acquaintance with them is so limited that I would not dare take that privilege.

Now, we are glad to come, and we are bringing you some men whom it will do you good to know. We have with us a man whom it has been my pleasure to know for thirty or forty years, almost my entire life. He has been superintendent of one Sunday School that I know of for thirty years. He is a man that the Arkansas Medical Society did itself the honor to elect as its president at its last meeting. (Apnlause.) I refer to Dr. J. C. Wallis of Arkadelphia. We have in our group, or who will be here, men who are authors of text-books, men who have made discoveries in medicine. Their reputations have extended wherever medical knowledge is known and those men, ladies and gentlemen, are citizens of the State of Arkansas. These men have come to you, and we hope that, by the mixing of these men with your men, we shall get better ideas and larger vision, and that we shall all go away very much benefited.

Now, the medical profession is still making its fight in the prevention of disease. We are beset by many disadvantages, by different "isms," which should not be the case; but we expect to continue the fight, knowing

If we win the battle, you will praise your Maker's name;
If we lose the battle, then the doctor will be to blame.

J. C. March, first vice president: We will now have the president's address. (See first page of this issue.)

On motion, the chair appointed Drs. Cargile, Garrison and Mann as Committee on President's Address.

Adjourned.

HOUSE OF DELEGATES—THIRD DAY.

THURSDAY, MAY 4, 1916, 11:00 A. M.

President Wallis called the House of Delegates to order.

Roll call showed a quorum present.

The secretary read the report of the Committee to Visit the Medical Department of the University of Arkansas.

Arkadelphia, Ark., May 1, 1916.

The Honorable State Medical Society of Arkansas

We, the undersigned, members of your committee to visit the Medical Department of the University of Arkansas, beg to report that we have fulfilled your request and made a personal inspection of the various departments of such institution. We found the Laboratory and Primary Departments, which are located in the old statehouse, nicely equipped, well kept and conducted on a high educational plan.

The old college building, which is situated on Second and Sherman Streets, was found to be, as is well known, dilapidated, and while it has been improved, it is still inadequate for the purpose it is used and should be replaced with a more modern and suitable structure. One that would afford more comfort to the students, better light, ventilation and sanitation, as well as sufficient fire escapes.

The library and reading room is well supplied with current medical literature and other references and should be kept open to the student body at all hours.

The museum in connection with the school should be greatly enlarged and be well furnished with nicely mounted and well-preserved specimens for teaching purposes in the various branches. The dispensary case records were found to be scientifically kept and gave evidence of a liberal patronage.

The curriculum generally was well arranged, but there was found entirely too many vacant hours caused by non-attendance of the lecturers on some of the important branches. By all means this should be remedied.

We very much regret to state that a vast amount of the much-valued clinical material that the city of Little Rock affords is to a great degree not available for the student body. The cause of this appears to be petty jealousy on the part of the management of the City Hospital and some of the faculty. If possible, pressure ought to be brought to bear in some way to remedy this. The dissection room is satisfactory.

Practically no arrangements are made for the students to visit and follow up the medical and surgical cases at the City Hospital. Other hospitals are so far and inconvenient to the college that it is hardly possible that the students take sufficient interest in these clinics. On the whole, therefore, it is the suggestion of your committee that the student body is not receiving the clinical advantages that should be afforded them by an accredited college, and we would recommend that efforts be made to remedy such conditions.

We would also earnestly urge that there be a more hearty co-operation and sympathy extended the school by the medical profession of the state.

Yours truly,
N. R. TOWNSEND, Chairman,
T. J. STOUT, Secretary.

Dr. Kirby: I move that the report be received, and that it take its usual course. (Seconded.) They make some recommendations there. There are only two ways that people can get a medical education. One of them is for the man to have the money or means to go to a medical school, or somebody to furnish it to him, and another one is for the state to aid him in this work.

Just to be as short and explicit as I can in the matter, other states are rendering aid and assistance to the Medical Department as well as the Farming Department. I have no complaint to make, except the mistake they have made in having five agricultural schools in this state, when we should have but two, and conserve the money and get better ones; one in the mountain region, and one down in the level land region, and save the means to be used for some other purpose. I have no fight against any school that instructs our youth in any path. I am fortunate, thankful to say, that I am able to educate my boys in medicine, but there are poor boys who have just as much ability as my boys, who have no chance whatever for medical education. This paper states that there should be some means used for bringing it about. It has been stated by a very eminent gentleman that Arkansas cannot support a first-class school. Perhaps not, but it can support and carry on a good school. I have got state pride enough to say, and I want to insist upon every medical man here, when he goes home, the importance of seeing his legislators, his state senators, and insist upon them doing something toward making it possible for the poor young men of this state to obtain a medical education. (Applause.)

Carried.

REPORT OF COMMITTEE ON PRESIDENT'S ADDRESS, BY DR. CARGILE.

To the Members of the Arkansas Medical Society:

We, your committee, to whom the president's address has been referred, wish to say that it is full of teuder and wise exhortations, which, if followed by the members individually and collectively, would redound to much good for organized and legalized medicine in our state.

If we interpret correctly his conservative remarks concerning the worthy physicians who are not members of our society as applying to the undergraduate, we earnestly and respectfully recommend that our organic law be amended so as to admit them.

CHAS. H. CARGILE, Chairman,
C. W. GARRISON,
R. H. T. MANN,
Committee.

REPORT OF REFERENCE COMMITTEE.

Dr. Gibson:

The report of the Committee on Scientific Section requires no action.

The resolution of Dr. Smith, proposing that the reports of committees be distributed in advauce before the meeting, we recommend that that be not adopted, but that the advance reports be published in the issue of The Journal immediately preceding the annual meeting.

The report of the chairman of the Committee on Legislation is returned without action.

We recommend the adoption to amend the law regulating the practice of medicine, as to the time of examining candidates, changing it from the present time, May aud November, to January and July.

We move the adoption of the report of the delegates to the A. M. A.

We recommend that the report of the Committee on Trained Nurses be adopted, and the committee continued.

The report of the Board of Visitors to the Medical School has just been handed to me, and I haven't had time to consider it. We don't think it requires any action of the committee. It has been read before the society.

Dr. Caldwell of Little Rock: I move that the report of the Reference Committee be accepted, and the committee discharged.

Seconded. Carried.

Dr. Cargile of Bentonville: I move that we extend our thanks to the citizens of Texarkana and the Miller County Medical Society for their very kind entertainment toward us during our stay here.

Secretary: I would like to amend that by including the management of the Huckins House and the members of the Elks' Lodge.

Dr. Cargile: I shall be glad to accept that amendment.

Seconded. Carried.

Dr. Gibson: I have a resolution that I would like to offer:

Resolved, That this association recognizes specialists as proper and legitimate fields of practice.

Resolved, That specialties shall be governed by the same rules of professional etiquette as have been laid down for general practitioners.

Resolved, That it shall not be proper for specialties to publicly advertise themselves as such, nor to assume any title not specially granted by a regularly chartered college.

Resolved That private hand bills addressed to members of the medical profession, or by cards in medical journals, calling the attention of professional brethren to themselves as specialists, be declared in violation of the code of ethics of the American Medical Association.

Dr. Cargile: I move its adoption.

Dr. Gibson: I will explain that that is a copy of a resolution adopted by the American Medical Association in 1869, and is still in force, and I hope it is not necessary to urge it, because, if anyone who

reads our Journal and gets literature that I have in my pocket, he would be convinced, I think, that something of the kind is quite necessary, and very soon.

Dr. Ellis: I move that this resolution be accepted. Seconded.

Dr. Snodgrass: This resolution should be laid over for one year before it is acted upon finally.

Dr. Gibson: It is not an amendment to the constitution.

Dr. Snodgrass: We have some contracts made by the editor of The Journal for carrying cards for certain doctors for a certain length of time. The contracts have not expired. If we pass this resolution, would it be necessary to refund them their money, or should we continue the contracts? It is going to be quite a loss in revenue to take the cards out of The Journal. The editor has been very diligent in soliciting advertisements and other legitimate matter that he thought would aid in the publication of The Journal and lessen the drain on our resources. He has succeeded this year in getting in sufficient money to have a little surplus over expenses, and it does not come out of the dues paid in by the membership. We have accumulated quite a little money. We can afford to publish The Journal for a few years without taking any advertising at all. If this resolution is passed, I suppose we would have to refund the money on these contracts for professional cards. Personally, I am in favor of the resolution.

Dr. Gibson: That will not be necessary at all. The principles of ethics prescribe what may be done and what may not be done. I don't like to discuss this question, because I have no personal feeling in it whatever, but it has gotten to be an evil that ought to be stopped, because men are advertising there that are well known not to practice as specialists at all. The A. M. A. decided years ago that it might be proper for a man, who confines his specialty to a certain class of cases, to advertise that his practice was limited to that, if he honestly practices that. But we all know of members that don't make any pretense to specializing, but are in general practice. There is nothing in the code of ethics that prevents men confining themselves to special work.

I have some circulars in my pocket, and in my memory book. I will read one of them. I will not mention the name, because the gentleman is not here; but you probably will recognize him, and see the abuse that has asserted itself.

"Dear Doctor: Just a word to remind you that I am still doing surgery and gynecology. If you refer your business to me, I shall be pleased to give your patients the very best service at the very lowest cost, commensurate with good surgery and hospital facilities. * * * Hospital is one of the best equipped hospitals in the South."

(I suppose you know where it is from now.)

"There are good boarding houses in close proximity, where friends and relatives can find a place to stop at moderate cost. Make my office your loafing place while in Little Rock. Have your mail sent to my care. Phone me when you need a nurse. Telephone me at my expense when you are ready to send patients, and I shall be pleased to have a conveyance meet the train day or night. Yours fraternally."

More could be said, but I believe it is not necessary.

Dr. Cooper: I second it.

R. L. Saxon of Little Rock: I would like to say a word. I happen to be one of those fellows who is running a card in The Journal, confining my work to certain lines. I happen to be on the Board of Censors of our county society, and closely associated with another member of the Council of the State Society. Now, I have always thought it was nothing wrong, as Dr. Gibson said there, to put in just exactly what you do. I am not in favor of this kind of resolution, but I am in favor of a resolution that will outline just what shall be published and what shall not. It has been my understanding that the Council has been the guide heretofore, in conference with the editor of The Journal, as to what kind of cards and matter shall go into The Journal for publication. So, I think this resolution is a little premature or out of place, coming from the House of Delegates. The Council should make this recommendation. If there are errors in the management of our Journal, then the Council should mention that in their report, and correct them. If the member that made the resolution feels that this is a fraudulent practice in our state organ, then I can say I am in favor of correcting it through the proper channels, through our Board of Censors, and for them to make a standard recommendation as to what kind of cards shall go in our Journal.

On request of Dr. Gibson, the secretary read Section 4, Chapter II, of the Principles of Medical Ethics:

> Solicitation of patients by circulars or advertisements, or by personal communications or innuendo, not warranted by personal relations, is unprofessional. It is equally unprofessional to procure patients by indirection through solicitors or agents of any kind, or by indirect advertisement, or by furnishing or inspiring newspaper or magazine comments concerning cases in which the physician has been or is concerned. All other like self-laudation defy the traditions and lower the tone of any profession, and so are inhibited. The most real and effective advertisement possible, even for the young physician, and especially with his brother physicians, is the establishment of a well-merited reputation for professional ability and fidelity. This cannot be forced, but it must be the outcome of character and conduct. The publication or circularization of ordinary, simple business cards, being a matter of personal taste or local custom, and sometimes of convenience, is not per se improper. As implied, it is unprofessional to disregard local customs or contravene recognized ideals in publishing or circularizing such matters. It is unprofessional to promise radical cures, to boast of cures and secret methods of treatment or remedies, to exploit services of skill or of success in the treatment of disease, or to employ any methods to gain the attention of the public for the purpose of obtaining patients.

On request of Dr. Caldwell, the secretary read Section 3, Chapter VII, of the Constitution and By-laws.

> The Council shall be the Board of Censors of the society. It shall consider all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this society. All questions of an ethical nature brought before the House of Delegates or the general meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members or component societies, on which an appeal may be taken from the decision of an individual councilor, and its decision in all such matters shall be final.

President: According to that, the proper course would be to refer this to the Council.

Dr. Gibson: That is simply a declaration of this society on those things, reaffirming an old established custom. I have no objection to referring it to the Council. There are no specific charges in it.

President: I will refer it to the Council, and they can present their findings in another report yet to be made, if they want to.

Dr. Gibson: I have another resolution I would like to introduce:

> Resolved, That the president appoint a committee of five members, whose duty it shall be to confer with a similar committee of the Arkansas Bar Association for the purpose of preparing and having passed by the Arkansas legislature a bill for the better regulation of medical expert testimony. (Applause.)

On motion of Dr. Cargile, the resolution was adopted.

President: The committee will be named later.

Dr. Kirby: The chairman of the Nominating Committee has been laboring under a mistake. The program as prepared says that at 2:00 p. m. the Nominating Committee shall report, and then the election of officers take place. The Constitution and By-laws, page 13, says that the report of the Nominating Committee shall be the first order of business of the House of Delegates after the reading of the minutes on the morning of the last day, and the election of officers the second order of business on the last day. I suppose we shall have to be governed by the Constitution and By-laws. I have been acting under the assump-

tion that the program as prepared was correct, but I have been corrected by Dr. Caldwell, and I thank him, of course, for it. The Nominating Committee, under the circumstances, with your permission, will read its recommendations.

Dr. Cargile: Before that is taken up, to me there is a very important matter we ought to deal with. We are fast reaching the period when it will be impossible to collect a medical history of this society. There are a few of us charter members, Dr. Kirby, Dr. Clegg, Dr. Welch—I don't know whether Dr. Kirby and Dr. Welch——

Dr. Kirby: I haven't been in it from the beginning.

Dr. Cargile: Dr. T. E. Hurley of Bentonville, and possibly a few others who are yet alive. Fortunately, we have one member who, while not a charter member, has been a member for thirty-nine years, I think. I haven't mentioned this matter to him. He does not know I am going to mention it, but he perhaps knows more of the medical history of this society than any dozen, perhaps any fifty, of us, or all of us. I want to move that the president appoint a committee of three, with Dr. Meriwether as chairman, to negotiate or arrange with that member to get in good form, to be published in The Journal unless it is too long, or even in pamphlet form, or both—I think it should be both—a medical history of this society. I need not state that Dr. Gibson is the only one who can do that. He can do it better than anyone else, as he said, that memory book of his is wonderful. He began, I think, to be secretary about thirty-eight or thirty-nine years ago, and was secretary fifteen or more years. We should take steps now to get this history, or very soon we shall not be able to get this information. The older ones are going to pass away. It means a great deal of work, and I don't mean that we should ask Dr. Gibson to do all that work for nothing.

Dr. Clegg: I second the motion.

Carried.

President: I appoint on that committee Drs. Meriwether, Gibson and Bathurst.

Dr. Gibson: I would like to state that on one occasion in Little Rock Dr. P. E. Burton, quite a distinguished physician and quite an old man, probably ninety years old, was noted for his blasphemy and profanity, although a good man. They had a revival at Little Rock, and some of his lady friends prevailed upon him to go to church, and at the Presbyterian Church they called on him during a prayer. He stood up and was looking around this way. The evangelist seemed to pray particularly for him. "Thank God for this interest being taken by the old people. Thank God the gospel has reached them. We thank God for these hoary heads that are in the congregation. We thank Thee that these silver locks are looking up to heaven," and all that kind of thing. Dr. Burton looked around that way, and finally said, "Well, by God, you needn't think I'm so damned old!"

Dr. Kirby submitted the report of the Nominating Committee.

REPORT OF NOMINATING COMMITTEE.

Mr. President, the Nominating Committee has completed its duties and wishes to make the following report:

President—C. H. Cargile, W. A. Snodgrass and M. L. Norwood.
First Vice President—L. L. Purifoy.
Second Vice President—J. M. Lemons.
Third Vice President—W. R. Brooksher.
Treasurer—Wm. R. Bathurst.
Secretary—C. P. Meriwether.
Councilor of Second District—J. C. Cleveland.
Councilor of Fourth District—Wm. Breathwit.
Councilor of Sixth District—J. H. Weaver.
Councilor of Eighth District—Earle H. Hunt.
Councilor of Tenth District—J. T. Clegg.
Delegate to the American Medical Association—C. P. Meriwether.
Alternate—Robert Caldwell.

We recommend that the expenses of the delegate be paid by the society.

Dr. Kirby: It has been the custom in other states to send the secretary of the State Society as delegate to the A. M. A., from the fact that he is better acquainted with the affairs of the society, and can answer questions, etc., better than any other one of us. For that reason we selected him.

Dr. Cargile: I move that the report be accepted.

Secretary: You cannot move to adopt the entire report, because there is a part of it that has got to be voted upon.

Dr. Cargile: We can accept the report of the committee, and then go on and elect the president.

Secretary: Do you accept it?

Dr. Cargile: Accept it; adopt it.

Seconded. Adopted.

A ballot being taken on the names of M. L. Norwood, W. A. Snodgrass and C. H. Cargile, neither candidate received a majority. A motion was made and carried that after the second ballot, the hindmost man be dropped. On the second ballot neither candidate received a majority, and the last man, Dr. Cargile, was dropped. On the third ballot Dr. Norwood received twenty-six votes and Dr. Snodgrass seventeen, forty-three votes having been cast, and the chair announced the election of Dr. Norwood as president for the ensuing year.

On motion of H. R. McCarroll of Walnut Ridge, the remaining nominees were elected by acclamation.

F. H. Clarke, secretary of the Medical Association of the Southwest, cordially invited the members to attend the meeting of that association in Fort Smith, Ark., on October 2, 3, 4, 1916, and stressed its importance. He expressed his appreciation of the pleasure afforded by his visit to the Texarkana meeting.

F. C. Mahoney of El Dorado presented the following:

Whereas, The movement for child betterment has become almost universal in its scope; and,

Whereas, The reduction in the general mortality statistics has been largely due to a study of the causes of infant mortality and the education of the public in infant hygiene; and,

Whereas, The history of this society is one of altruistic endeavor and humanitarian enterprises, ever espousing those measures which are best calculated to prevent disease, increase economic efficiency and promote happiness; therefore, be it

Resolved, That the president appoint five members of this society to compose "The Committee on Infant Welfare of the Arkansas Medical Society," whose purposes shall be as follows:

1. To make a study of the causes of infant mortality in this state, to the end that unnecessary disease and deaths may be prevented.

2. To collect, prepare and disseminate such information relating to infant hygiene as shall be of educational value to the public.

3. To co-operate with, and give such assistance as far as it might be able, to the Arkansas Federation of Women's Clubs, the Arkansas Welfare Conference, and all other organizations whose purposes are devoted to the welfare of the child.

Resolved, further, That within thirty days after the passage of this resolution, the committee shall meet in Little Rock for organization, and take such necessary steps as shall be best calculated to carry out the purposes of this resolution.

Carried.

Secretary: I want to state, for the benefit of the Miller County Medical Society, that we had an attendance at this meeting of 167 registered members, 28 visitors, a total registration of 195.

On motion of Dr. Snodgrass, the resolution of Dr. Gibson, referring to advertisements in The Journal, was referred to the incoming Council for final action.

The chair appointed Drs. Snodgrass and Cargile a committee of two to present the president-elect.

No further business appearing, the House of Delegates, on motion of Dr. Bathurst, adjourned sine die.

GENERAL SESSION—THIRD DAY.

THURSDAY, MAY 4, 1916.

The general session was called to order by the president.

Dr. Snodgrass: It affords me great pleasure to introduce to you my friend, Dr. Norwood, as your incoming president.

Dr. Norwood: Mr. President and Gentlemen of the Arkansas Medical Society: I haven't any speech to make, except to thank you for this honor. I deem it more of an honor to be president of the Arkansas Medical Society than to be elected governor of Arkansas. (Applause.) Another thing that makes me feel this vote of confidence is the fact that the other two gentlemen named represent the best thought of Arkansas. Thre are no better men than these, and I feel all the more honored that I received more votes than they. At some time in the future I shall try to express my appreciation in a proper manner. Again I thank you. (Applause.)

On motion, the General Session adjourned sine die.

WARNING.

We are advised that a very clever swindle is being worked by a young man calling on physicians in various sections of the country. He is fraudulently soliciting orders and collecting money for subscriptions to medical journals and for medical books published by various firms. He usually represents himself as a student, working his way through college, and trying to get a number of votes to help him win a certain contest. He sometimes uses the name of L. D. Grant, H. E. Peters, R. A. Douglas, and F. C. Schneider, and he usually gives a receipt bearing the heading of some Society or Association, such as United States Aid Society, the Alumni Educational League, the American Association for Education, etc.

The description given of this swindler is: young man of Jewish type, rather slender, with dark hair combed straight back, and shows his teeth plainly when talking.

The whole scheme is a fraud. The societies mentioned do not exist. The idea is to collect money by offering special discounts and prices on medical books, and skip with the money.

This young man does not represent W. B. Saunders Company, whose name he frequently uses. He is a fraudulent subscription agent, and physicians generally should be on the lookout for him.

Children may present fever, delirium, convulsions, marked gastric distress and other phenomena that in an adult would be considered grave, yet under appropriate treatment symptoms subside in a few hours.

Soubeyran advises injection of formalin to cure hydrocele. Anesthesia is unnecessary. Equal parts formalin, alcohol and glycerin are used.

The primary thing in intestinal toxemia may not be stasis, ptosis, colitis nor peri-intestinal membranes, bands and adhesions; but intestinal bacterial food poisons and intestinal bacterial infection.

Hexamethylenamin is useful in only one class of cases—acid cystitis. One who uses it for other conditions draws largely on his imagination for therapeutic results.

For neuralgia of fifth nerve, inject hypo pilocarpin, gr. 1-10; also for dull, aching pains in sides over lower ribs.

Pathogenic organism in the normal vaginal secretions should be considered only a possible and not a probable source of puerperal infection.

In 1912 the United States lost 9,035 women from puerperal maladies, sepsis being the principal cause of death.

It is in the rural districts that a physician can be the greatest value in instituting needed sanitary conditions.

Pleasure is a real therapeutic agency; meaning constructive pleasure which leaves no after sting of vain regret.—J. M. Cleaver, Medical Standard.

The use of tuberculin should always be combined with rest, hygienic outdoor treatment, and in the vast majority of instances should be subservient to this.—Litterer, Southern Pract.

In emerging from the beast, man has lost his fur, is losing teeth, accessory sinuses, cecum and appendix, and has acquired constipation.—Jackson, Wis. Med. Jour.

Metchnikoff found calomel salve a prophylactic against syphilis, but only in 33⅓ per cent in a definite mixture of fats.—Med. Rev. of Rev.

There never will come a time when the world can do without the personal service of the doctor himself—wise, kindly, knowing, prescient.—Am. Jour. Clin. Med.

Three basic principles in treatment of chorea: remove all foci of nerve leak and irritation, correct vitiated metabolism and assist functional effi- ? ?

THE JOURNAL
OF THE
Arkansas Medical Society

Owned and controlled by the Arkansas Medical Society and published under the direction of the Council.

DR. WILLIAM R. BATHURST, Editor.

PUBLISHED MONTHLY. Price, $1.00 a Year in Advance. Single Copies, 25 Cents.

Entered as second-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under Act of Congress of March 3, 1879.

All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Address:
The Journal of the Arkansas Medical Society,
810 State Bank Building,
Little Rock, Ark.

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Anonymous communications will not appear in the columns of this Journal, no matter how meritorious they may be.

Editorials.

OUR NEW PRESIDENT.

Dr. M. L. Norwood of Lockesburg was elected president of the Arkansas Medical Society at the Texarkana meeting. Born January 12, 1875, in Paraclifta, Sevier County; the son of L. H. Norwood, a prominent merchant and planter. He is at that most promising age when experience has come to a man before the vigor of youth has become impaired, and so the society expects much from his administration. He is a "mixer," too. Like Paul, he is all things to all men. He is a physician with a large general practice, but that does not keep him from being in close touch with his fellow-men in a score of ways. He has taken, and still takes, an active part in the social, fraternal, educational, civic, commercial and religious affairs of his community. He is president of the Lockesburg School Board; president of the Board of Stewards of the Methodist Episcopal Church, South; vice president of the Bank of Lockesburg; vice president of the Lockesburg Hardware Company; is a member of the Masonic Order of the thirty-second degree, a Shriner, Elk, Redman, and Woodman. All of which is evidence of his mental and physical activities, as well as testifying to the esteem he commands in his community.

Dr. Norwood moved to Lockesburg with his parents in 1886, attended the public schools there, and later spent two years in Ouachita College, Arkadelphia. He entered Missouri Medical College, St. Louis, in 1893, and graduated from Beaumont Hospital Medical College (now the Medical Department of St. Louis University) in 1896. Later he did postgraduate work in St. Louis, Chicago and New Orleans. On November 28, 1899, he married Miss Kate Steele, daughter of Judge A. C. Steele of Lockesburg. They have two children, Robbie C., aged fifteen, and Frances M., aged eleven years.

The great interest Dr. Norwood has shown in county and state societies and the American Medical Association augurs well for his administration. He rarely is absent from his county society meetings and has registered at every annual meeting of the State Society in the last eighteen years, except on two occasions when he was kept away by illness in his family. He has been a very valuable member of the State Society, less as a contributer of papers than as a consistent worker. He has done great service on committees, especially that on Medical Legislation. He was a member of this committee in 1903 when the State Board of Examiners was created, and he served on it for the full constitutional limit of eight years, part of the time as president. The Journal bespeaks for our new leader the most full and hearty co-operation of every member of the State Society.

WISE SUGGESTIONS BY PRESIDENT WALLIS.

The president's annual address, delivered at the Texarkana meeting, is published in this issue of The Journal. Dr. Wallis stresses one feature which should command the attention and co-operation of every member. He says: "The State Society will never be right till we get the county societies right."

A chain is just as strong as its weakest link. The State Society is made up of the county societies. Every county society is a link in the chain; therefore, the strength of the State Society depends on the strength of the units composing it. "Put vim and vigor into them," says Dr. Wallis. This is what The Journal has been urging for a long time. To keep alive interest in the State Society it is essential that the interest of every member be kept alive in his county society. The monthly meetings must be made worth while; there

must be preparation. Members who will work and not shirk should be assigned to prepare papers for the next meeting. A Program Committee should be appointed in every county society, and if it does not prepare acceptable programs it should be superseded by a committee that will do so. As suggested by Dr. Wallis, it is not a difficult matter to induce physicians from other places to visit your county society and read a paper. Also, there is local talent in every community capable of preparing good papers. There should always be cases of interest to report. No county society can flourish and be of any real service merely by meeting at stated intervals and indulging in perfunctory remarks with no prepared program.

The social features of the meetings should not be neglected. Societies meeting monthly should make it a rule to introduce some social feature into every quarterly meeting. In Little Rock interest is kept alive in the Real Estate Bureau, the Insurance Bureau, the Rotary Club and other organizations by having a Dutch treat luncheon at every weekly meeting. The members of the county medical societies might assess themselves a small amount to provide refreshments for quarterly meetings. Local talent is always willing to oblige with a song or a recitation. There are many ways in which such meetings may be made attractive. And, as the president pointed out, if the regular meetings are made useful to the members, if the county society shows evidence of really doing something, there will be no difficulty in procuring new and desirable members. They will apply for admission themselves.

As The Journal has pointed out over and over again, a good secretary is the life of the society. The State Society secretary is quoted by Dr. Wallis as saying that if the rule were enforced dropping from the roll societies whose reports are not received by March 1, there would not be ten left on the roll. Also, he says that prompt reports from the counties would decrease his work 75 per cent. This is a lamentable condition. The remedy is in the hands of the county societies. Elect men to office not for the honor alone, but for their fitness and their willingness to do the work. In this way only can the State Society hope to achieve the position the importance of the state and the ability of the profession generally so richly deserve.

THE STATE HOSPITAL MUDDLE.

County medical societies in Arkansas, including that of Pulaski County, have expressed in no uncertain terms their opinions of the unwarranted interference by Governor Hays with the management of the State Hospital for Nervous Diseases. After the affair with Dr. Greene, one would have thought that even Governor Hays would have paused before again inviting public disapproval by playing politics with the state's most important eleemosynary institution as his plaything. The pernicious spoils system is at the bottom of it all. Political workers must have jobs, and as for the public who pays—well, in the words of a deceased Vanderbilt, "The public be damned."

As for the charges against Dr. Bledsoe, they are too absurd for serious consideration. If Governor Hays does not know that post-mortems are performed in every hospital of note in the world, if he does not know that the post-mortem is a necessary accessory in medical and surgical education, and that frequently the lives of the sick are saved by knowledge only obtainable by the post-mortem, then he is most lamentably ignorant for a man occupying so exalted a position.

And after a lot of criticism there comes an alleged compromise which is as unsatisfactory as the original charges. If Dr. Bledsoe was unmindful of his duties or in any way unfit to preside over the destinies of the hospital, the mere fact that he agreed to dismiss certain employes could not remove his unfitness. Indeed, the very fact that the charges were dismissed on that ground is the strongest proof of the real motive behind the charges.

And just when the public had come to accept this compromise and dismiss the matter from their minds, comes a second outrage in the demand made by the board that Dr. Bledsoe accept as assistant and in other capacities, people he did not deem competent, but who had been "elected" by the board when the law gives them no power to elect, but distinctly declares that the superintendent shall appoint. Effrontery is the only word—and that is almost too mild—which can express the action of the board in thus defying public opinion by again complying with the wishes of Governor Hays. It is surprising that the most ordinary self-respect, to say nothing of the respect of the public, does not suffice to deter the members of the board from becom-

ing the mere puppets of the governor regardless of the interests of the inmates of the hospital and of the taxpayers.

It is to be sincerely hoped that the next legislature will put it utterly beyond the power of any future governor to interfere with the management of the state's eleemosynary institutions. Too much is at stake. The care of the state's unfortunate insane and deficients is not a fit vehicle for exploitation by politicians to pay political debts.

"As a man's hair whitens and his features become furrowed, his back bent, and perchance his girth unduly expanded, we say, 'He shows the marks of time.' Time, however, has nothing whatever to do with such changes."

This incisive attack on the question of "Longer and More Effective Living" was made by Dr. Eugene Lyman Fisk, director of the Life Extension Institute, New York City, in an address before the Forty-third National Conference of Charities and Correction at Indianapolis, May 10-17. The speaker said that our conception of this question is worthy of the days of scholasticism, and further "If we protect the cells of our bodies from injury or strain, from poison, both internal and external, from starvation and bacterial attack, we shall be able to clip the wings of time."

An unexpected turning of the discussion on this subject into educational channels was accomplished by Professor L. J. Rettger of Terre Haute, Ind., who claims that the most important factor had been overlooked by failing to make rational use of the public schools. He said: "One cannot overlook the fact that the drunkard, the tramp and the criminal were for many years under the instruction of our teachers in the public schools."

Under the leadership of Dr. J. N. Hurty of the Indiana State Board of Health and Dean Charles P. Emerson of the Indiana University School of Medicine, five sessions on health subjects were arranged. Beyond these, however, health discussions were sprinkled throughout the entire series of forty-five sessions of the conference. Illustrations of this fact were the striking presentation of the health needs of rural school children made by Dr. Taliaferro Clark of the United States Public Health Service.

The conference at Indianapolis lasted eight days and broke all previous records for size of gatherings of men and women engaged professionally in social work. The main divisions of discussion were upon children, corrections, the family and the community, feeblemindedness and insanity, health, inebriety, promotion of social programs, public and private charities, and unemployment. The next session will be held at Pittsburgh during the spring of 1917 under the presidency of Frederic Almy, secretary of the Buffalo Charity Organization Society. Mr. Almy has already announced as the subject for his presidential address "The End of Poverty."

Abstracts.

QUININ AND UREA INJECTIONS IN HYPERTHYROIDISM.

New York Medical Journal, April 22, 1916.
Leigh F. Watson, M. D.,
Oklahoma City.

The author briefly reviews some of the methods of recent years that have instituted with the idea of controlling the hyperactivity of the thyroid gland. He emphasizes the necessity of rest, with proper dietetic and hygienic supervision, as the foundation for any procedure in the treatment of hyperthyroidism, and urges that the other ductless glands as well as the thyroid in each patient be studied; their role in contributing to the symptoms ascertained and treated accordingly. The author recommends the quinin and urea injections only to relieve hyperthyroidism, and not to remove the goiter; however, small recent goiters will usually disappear following the treatment. Much depends upon a proper selection of cases. The technic is difficult and the method is suitable for use only in a hospital by men experienced in the difficulty of thyroid surgery. The author describes an original method of raising the hyperthyroid patient's threshold to stimuli, by means of preliminary injections into the thyroid gland of a few minims of a sterile salt solution, followed by injections of sterile water, given at one- to three-day intervals. As soon as no hyperthyroidal reaction follows the water injections, their usefulness is at an end. If these preliminary injections are omitted, acute attacks of hyperthyroidism which might result disastrously are liable to follow. It is important that the slight pain of injection be minimized by the use of local anesthesia. The patient must not dread the injections, because the best results are secured through prolonged periods of treatment.

Personals and News Items.

Dr. E. N. Allen has moved from Little Rock to McAlester, Okla.

Dr. A. T. McKinney has been elected school director in Argenta.

Dr. Frank W. Mackay has moved from Fort Smith to Milwaukee, Wis.

Dr. I. W. Bollinger has moved from Jenny Lind to Henryette, Okla.

Dr. C. S. Means of Charleston has moved to Jenny Lind.

Dr. E. M. Gray of Evening Shade has moved to Floral.

Dr. W. F. Manglesdorf has been appointed chemist for the Choctaw district of the C., R. I. &. P. Ry. Co.

Dr. P. E. Thomas, Jr., of Clarendon attended the Roberts-Emerson wedding in Little Rock last month.

Dr. S. J. Hesterly of Prescott has returned from Chicago, where he has been attending the post-graduate clinics.

During the past month the following physicians have visited in Little Rock: Jester L. Rushing, Chidester; L. R. Ellis, Hot Springs; J. W. Meek, Camden; W. B. Lawrence, Batesville; Irwin Sheppard, Belfast; F. L. Irby, Wesson; George A. Causey, Swifton; Paul H. Jeffrey, Bethesda; J. R. Stephens, Hackett; J. V. Arrington, Blevens; O. S. Woods, Marshall; M. B. Owens, Eight Mile; J. W. Nolan, High Bank; Fred S. Watson, Rosboro.

The summer course given by the University of Arkansas Medical Department, May 11 to June 3, was a very successful one. The physicians who attended express themselves as highly pleased and much benefited by the clinical privileges and laboratory exercises provided by the faculty during their stay.

During the auto races at the top of Pike's Peak at Colorado Springs, Col., August 11, 1916, the El Paso County Medical Society has arranged for a dollar dinner and other entertainment, at which time Dr. Burton W. Sippy of Chicago, Ill., will deliver an address on "The Treatment of Peptic Ulcer, Past and Present." You are invited. If you can be present, notify Dr. E. L. Timmons, chairman of the Entertainment Committee, at Colorado Spring, Col., so provision may be made for you.

Just at this time newspapers all over Arkansas are burdened with "Tanlac" advertisements. It may be of interest to reprint the following comment:

Tanlac.—Food Commissioner Helme of Michigan reports: "A new panacea for the cure of 'all ailments of the stomach, kidneys and liver, catarrhal affections of the mucous membranes, rheumatism, nervous disorders and the like' is offered to the public under the name of Tanlac. The label on the bottle neatly avoids the pure drugs act by claiming to be only a 'tonic and system purifier.' An analysis of tanlac in the laboratory of this department shows the following: Alcohol, 16.4 per cent; glycerin, 2.0 per cent; licorice present, aloes or cascara present, gentian present, alkaloids (Berberin) trace. The presence of a trace of tartaric acid shows that wine is the base of this medicine. The 16 per cent alcohol gives it the 'kick' that makes a fellow feel good and ought to fill a long-felt want in 'dry counties.' Aloes is a laxative. Gentian is a bitter drug, so-called tonic. If the reader wants to be cured by the tanlac route at one-fourth the expense, let him get a quart bottle of good sherry wine. Then go to the local druggist and get one and one-fourth drams of glycerin and two drams each of aloes, gentian, licorice and cascara. Mix (if you wish), and you will have tanlac so near that neither you nor the manufacturer can tell the difference. This formula will give four times the quantity found in an ordinary $1.00 bottle of tanlac" (Journal A. M. A., February 26, 1916, p. 676).

TRI-STATE MEDICAL SOCIETY.

The Tri-State Medical Society of Arkansas, Louisiana and Texas will award three medals at its next annual meeting for the three best essays on some original work (laboratory or clinical) performed by doctors residing in either of the three states. The competition is not limited to members of the society, but any reputable doctor may compete for the prizes. All essays entered must be read by the writers before the society at its annual meeting at Texarkana, December 19-20, 1916.

It is hoped that the efforts of the society to stimulate research work in the three states embraced by the society will meet with active response from the profession.

All questions will be answered by Dr. J. M. Bodenheimer, Secretary, Shreveport, La.

THE ARKANSAS SOCIETY FOR THE STUDY AND PREVENTION OF TUBERCULOSIS.

The annual meeting of the Arkansas Society for the Study and Prevention of Tuberculosis met in Little Rock May 25. Dr. T. B. Bradford of Cotton Plant was elected field secretary and will travel over the state for the society lecturing on prevention and treatment of tuberculosis. The following officers were elected: President, Dr. A. C. Shipp, Little Rock; first vice president, Mrs. W. A. Billingsley, Newport; second vice president, John Q. Wolfe, Batesville; treasurer, T. S. Shannon, Little Rock; executive secretary, Murray A. Auerbach, Little Rock. Board of Directors: Dr. John Stewart, Booneville; Dr. C. W. Garrison, Little Rock; W. J. Echols, Fort Smith; Rabbi Joseph Jasin, Pine Bluff; Mrs. J. W. House, Sr., Miss Mary H. McCabe, Mrs. George B. Rose, Mrs. L. W. Sanderson and Rabbi Louis Witt, Little Rock; Mrs. W. H. Arnold, Texarkana; Roy M. Nix, Fayetteville; J. R. Meechan, Cotton Plant; Dr. C. R. Chesnutt and Dr. W. R. Bathurst, Little Rock.

It was decided to conduct an active campaign to establish local societies throughout Arkansas and to send out literature regarding open-air schools and tubercular sanitariums.

EXAMINATION.

THE STATE MEDICAL BOARD OF THE ARKANSAS MEDICAL SOCIETY.

MAY 9-10, 1916.

PRACTICE—DR. J. C. WALLIS.

1. Describe one form of pernicious malaria and give its treatment.

2. Give period of incubation and day of eruption in smallpox, measles and scarlet fever.

3. Differentiate malarial from typhoid fever.

4. Give treatment of hemorrhage in typhoid fever and in tuberculosis.

5. Give cause and treatment of otitis media.

6. Describe arteriosclerosis and give its treatment.

7. Give cause and treatment of amebic and bacillary dysentery.

8. Describe sciatica and give its treatment.

9. Give cause and treatment of La Grippe.

10. What is the medical treatment of appendicitis?

THERAPEUTICS—DR. F. T. ISBELL.

1. What therapeutic methods would you follow in treating a case of lead colic?

2. (a) How would you apply cocaine in a case of dermatitis caused by rhus-poisoning (poison oak)? (b) What other remedies would you use?

3. What are the therapeutical uses of cupri sulphate; cupri arsenite?

4. Name one or more remedies that will reduce an elevated temperature, by: (a) Diminishing tissue change; (2) Reducing circulation; (c Dilating cutaneous vessels, and producing increased relaxation; (d Producing perspiration, and its evaporation; (e) Abstracting heat from the body.

5. Name four (4) conditions which modify the action of opium.

6. Give therapeutics of pituitrin.

7. What would you do in a case of poisoning by "Rough-on-Rats"?

8. (a) What remedies would you use in shock? (b) How would you apply them?

9. What remedies are indicated in nephritis associated with dropsy?

10. Differentiate the conditions in which hyoscin and opium should be used to promote sleep.

MATERIA MEDICA—DR. F. T. ISBELL.

1. (a) What alkaloids does physostigma contain? (b) What are the physiological antagonists of these alkaloids?

2. Name four (4) official liquid preparations of arsenic, giving the per cent of arsenic in each.

3. (a) What is the source of amyl nitrate? (b) Name some of its analogous compounds.

4. (a Give properties of oleum ricini. (b) What is the cathartic principle of oleum ricini?

5. (a) Name official preparations of morphine. (b Give physiological action.

6. (a) Describe cumulative action of a drug. (b) Give an example.

7. (a) What do you understand by a solution? (b) A decimal solution? (c) A centesimal solution? (d) What solvents are used in making solutions?

8. (a) What are elixers? (b) How prepared? (c) Name two (2) official elixers.

9. (a) How is hydrargyrum cum creta prepared? (b) What does it contain? (c What per cent of hydrargyrum does it contain?

10. Give the source, process of obtaining, and usages of sacaharum lactis.

ANATOMY—DR. J. A. BOGART.

1. With what bones do each temporal articulate?

2. Describe the structure of the knee joint.

3. (a) Where does the abdominal aorta commence and where does it terminate? (b) Name its branches.

4. Give four (4) principal points of distribution of the pneumogastric or par vagum nerve.

5. Give origin and distribution of the median nerve.

6. Describe the thoracic duct.

7. Locate and describe the ileocecal valve.

8. What muscles form the quadriceps extensor crureus and where is its conjoined tendon attached?

9. Give origin, insertion and action of the following muscles, viz: plantaris, rectus femoris, and gracilis.

10. What anatomic structures would be severed in an amputation at the middle third of the leg?

OBSTETRICS—DR. J. A. BOGART.

1. (a) Name the female reproductive organs. (b) Describe the uterus and give its anatomic relations.

2. What is the perineal body and what are its functions?

3. Describe the mechanism of labor in L. O. A. presentation.

4. When is curettage of the uterus justifiable in obstetric practice, and how should it be performed?

5. What are the dangers to (a) mother, (b) child, from gonorrhoea during pregnancy and labor?

6. What do you understand by accidental concealed hemorrhage? Give the causes, symptoms and prognosis.

7. What is puerperal infection? Give a clinical picture of a case, including causes, symptoms and treatment.

8. Give direction for the care of a woman after delivery, (a) normal; (b) instrumental.

9. Describe the fetal circulation.

10. What are the chief symptoms of ectopic gestation upon which a diagnosis may be made?

SURGERY—DR. E. F. ELLIS.

1. Describe in detail how you would treat wounds aseptically; and antiseptically.

2. Give causes, symptoms and treatment of acute mastoiditis.

3. Give causes, symptoms and physical signs and treatment of chronic empyema.

4. Differentiate between surgical shock and concealed hemorrhage.

5. Name varieties of shoulder joint dislocation, accidents that may occur in reduction, and describe and improved method of reducing any variety of dislocation of shoulder joint.

6. Differentiate a calculus in kidney and calculus in urinary bladder.

7. Give causes, symptoms and treatment of diffused peritonitis.

8. What are the symptoms of intestinal perforation in typhoid fever; and give treatment?

9. Give points of differential diagnosis in fracture of neck of femur and backward dislocation of head of femur. Outline treatment for impacted fracture in neck of femur.

10. Give causes, symptoms and physical signs and treatment of strangulated inguinal hernia.

BACTERIOLOGY—DR. T. J. STOUT.

1. What is the composition of an inflammatory exudate?

2. What is the most common etiological factor in the formation of a "pus tube" (pyosalpingitis ?

3. Detail method of diagnosing diphtheria microscopically; (a) giving kind of culture-media; (b) time for growth; (c) stains used; (d) technique of staining.

4. Name the various changes microscopically in the blood that may be the result of pathological conditions.

5. (a) What are spores? (b) Name some bacteria that have spores and give technique of staining same.

6. What is meant by the term "chromogenic" bacteria? (b) Name and describe one which is most commonly found.

7. What bacteria may be the cause of meningitis?

8. (a) Differentiate the gonococcus and the diplococcus intracellularis of meningitis. (b) Give technique of culture and staining of each.

9. Name the various kinds of leukocytes.

10. Differentiate vaccines, phylacogens and antitoxins.

PATHOLOGY—DR. T. J. STOUT.

1. Explain the mechanism of a rise in body temperature and name the more common tissue alteration that accompanies same and explain why.

2. Explain cause and formation of a multiocular ovarian cyst.

3. What disease is characterized by the so-called "cold absess"?

4. How are toxines disposed of in the animal body?

5. What are the protective agencies by which the body resists the harmful effects of pathogenic bacteria?

6. Explain the difference between a sarcoma and a carcinoma.

7. Differentiate benign and malignant tumors.

8. (a What conditions are produced by hypertrophy of the thyroid glands? (b) By atrophy?

9. Describe the skin lesions of the following diseases: Herpes zoster, smallpox, syphilis and scarlet fever.

10. Mention some of the more serious complications peculiar to diphtheria and scarlitina.

PHYSIOLOGY—DR. O. D. WARD.

1. How is a lymph formed?

2. What are factors which control the flow of lymph?

3. Why are the auricula-ventricular and semilunar valves of the heart never open at the same time?

4. (a) How are the vertical, lateral and anteroposterior diameters of the chest increased during inspiration? (b) How diminished during expiration?

5. What are the bile pigmenta and from what do they originate?

6. Name the secretion which possesses the widest range of digestive power.

7. Name the waste products of muscular metabolism.

8. (a) What is internal secretion? (b) What is excretion? (c) Give example of each.

9. What are the chief factors in the expulsion of urine from the bladder?

10. (a) What three things are necessary for a reflex action? (b) Give illustration of a reflex action.

GYNECOLOGY—DR. W. F. SMITH.

1. What are the anatomical and physiological changes during the menopause? What organs are affected?

2. Give briefly treatment of shock following an abdominal operation.

3. Give diagnosis and treatment of chronic endocervicitis.

4. Define salpingitis and give indications for operative procedure.

5. Give varieties, symptoms and treatment of tubal pregnancy.

6. Name the various malpositions of the uterus.

7. Name conditions frequently associated with retroflexion.

8. Give the most common disorders which will cause menorrhagia.

9. Give three predisposing causes of cystitis.

10. Briefly outline nonsurgical treatment of inflammation of the uterine appendages.

CHEMISTRY—DR. W. F. SMITH.

1. Define physical and chemical changes with an example of each.

2. Define ten elements and give their symbols.

3. Complete the following:

$$KCLO_3 + MNO_2 + heat = ?$$

4. Give two methods for preparing H.

5. (a) What reaction occurs when H is passed over copper oxide at ordinary temperature? (b) At a high temperature?

6. What is an element? Name five with symbols of each.

7. In how many states can matter exist? Give an example of each.

8. What is valence?

9. How is phosphorus pentoxide formed?

10. Give various steps in making an urinalysis.

HYGIENE—DR. O. D. WARD.

1. State the harm to health by living in damp houses.

2. State quantity of air taken into the lungs by an adult at each ordinary inspiration.

3. Give the effects on an individual of too high or too low temperature.

4. Give hygienic precautions to be observed for the artificial feeding of infants.

5. What are the dangers of dust, dirt, and organic matter?

6. Define the term "disinfection" and name the most satisfactory disinfectant for (a rooms, (b) clothing, (c hands, (d excreta.

7. What hygienic precautions should be observed by children and adults of a gouty diatheses to prevent rheumatism?

8. Name five causes which make meat unfit for food?

9. Name ten important hygienic points to make a modern nursery apartment for children.

10. Name the precautions to be observed to prevent the spread of influenza in a household or community.

DEAR DOCTOR:

The Journal and the Co-operative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

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Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask The Journal about them, or write direct to the Co-operative Medical Advertising Bureau, 535 N. Dearborn Street, Chicago, Ill.

We want The Journal to serve YOU.

New and Nonofficial Remedies.

Since publication of New and Nonofficial Remedies, 1916, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies:"

MEAD'S DRY MALT SOUP STOCK.—A mixture containing desiccated maltose and desiccated dextrin (about equal parts) 47 per cent, wheat flour 47 per cent, potassium carbonate 1 per cent, and moisture 5 per cent. Mead, Johnson & Co., Jersey City, N. J. (Journal A. M. A., May 20, 1916, p. 1623).

PHENOLPHTHALEIN-MONSANTO.—A nonproprietary preparation of phenolphthalein admitted to New and Nonofficial Remedies (Journal A. M. A., May 20, 1916, p. 1623).

Propaganda for Reform.

CONTROLLED CLINICAL TRIALS.—At the "Cardui" trial which is now in progress, A. S. Loevenhart, professor of pharmacology and toxicology at the University of Wisconsin, testified as to the conditions under which the clinical trial of a medicine would give results as certain as those yielded by the usual pharmacologic methods. Professor Loevenhart had testied that he preferred his students to be familiar with drugs the value of which had been clearly worked out by accurate clinical methods and shown to be useful in the treatment of disease. Asked as to the character of the clinical trials required to demonstrate the value of a drug, he held that

there was no difference between a careful clinical test and a careful pharmacological test. Loevenhart explained that to determine if Wine of Cardui had the claimed action, an experimenter would take a certain number of cases of amenorrhea, perhaps fifty, and divide them into two sets; treat twenty-five with Wine of Cardui and the others without it, and then make an estimate of the amount of the material passed at the time of the menstrual period. Such trials carried out in a hospital, where the physician receives his reports from nurses and is not obliged to depend on the statements of the patients, he explained, would be as reliable as a properly conducted pharmacologic experiment (Journal A. M. A., April 15, 1916, p. 1219).

Diagnosis of Female Disorders.—Manufacturers of "uterine wafers," etc., often advise the use of their preparations without physical examination of the patient when patients are disinclined to submit to such physical examination on the chance that one of the asserted constituents of the proprietary may hit the cause of the trouble. In this connection the testimony of J. Clarence Webster, professor of obstetrics and diseases of women in Rush Medical College, Chicago, in the "Wine of Cardui" case, is of interest. He was asked: "* * * Is it necessary to make an examination of the female pelvis in order to determine the condition, the underlying cause of the condition and the treatment which is necessary?" He replied: "It is necessary. * * * Because from symptoms one can rarely have any accurate idea of the pathological conditions in the body, in this part of the body. * * * There are many symptoms which are common to different conditions, and consequently it is necessary in analyzing a case to make a careful physical examination." Again, when asked, "Can you determine, or can the conditions of the uterus or pelvic organs be determined merely by attention to description of symptoms which a patient gives?" he replied, "I cannot" (Journal A. M. A., April 22, 1916, p. 1337).

Proper Self-Medication.—In the course of his testimony in the "Cardui" trial, John Leeming, M. D., Chicago, explained the extent to which self-medication is to be encouraged. Asked if it was very dangerous for a person who thinks he has a cold to take some aspirin without going to a doctor, he replied that, while in exceptional cases it might be exceedingly dangerous, in most cases of simple cold it would not be so, in that Nature's recuperative powers would in most cases throw off such a cold. He explained that he always advises his patients how to treat themselves for simple ailments and to come to him when there are danger signs. Asked if it was dangerous for a person with a cough to get any medicine without a diagnosis, Dr. Leeming replied that it would not be dangerous at all if the person understood his case and in consultation with his doctor he has been generally advised. In families where he is the attending physician he often advises not to send for him in case of a slight cold, but to take a little medicine that will help Nature to throw it off (Journal A. M. A., April 22, 1916, p. 1330).

What is a "Medical Authority?"—There has been a tendency to look upon publishers of text-books as authorities and not to consider a physician as an authority on a certain subject unless he has written a text-book on it. That the publication of a book does not prove its writer to be an authority is the opinion of J. Clarence Webster of Rush Medical College, expressed at the Cardui case which is being tried in Chicago. Having referred to Frank Billings as an authority, Webster was asked to define the term "authority." He replied: "As far as a human being can be an authority on anything, I would regard a man who had worked at a particular subject in a scientific manner over a period of time, and who had more experience in that subject than other people, or most other people, as the best human authority that could be found." Asked if a man was more of an authority if he had written a book, Webster replied: "Often less in the eyes of the world" (Journal A. M. A., April 29, 1916, p. 1410).

Viburnum Prunifolium Inefficient.—J. Clarence Webster, holding the chair of obstetrics and diseases of women in Rush Medical College, testified in the "Wine of Cardui" case that he gave up the use of fluid extract of viburnum prunifolium because he believed that the benefit that he obtained from its use in pain in association with menstruation was due to the alcohol in it. He had never had any reason whatever to believe that viburnum was of any value in warding off a threatened abortion. When in cases of painful menstruation he used the solid extract which contained no alcohol, he could not get the same results

that he had obtained before, and he gradually gave up the use of the drug altogether. Arthur A. Small, senior physician at St. Joseph's Hospital, Chicago, testified of extensive experience with the use of viburnum prunifolium, while resident physician in the Toronto General Hospital. As a result of his experience there, he is of the opinion that viburnum prunifolium is of no value in the treatment of female diseases. In these experiments both the fluid extract and the solid extract were used and it was found that the alcoholic solutions would prevent or lessen pain in some cases. In other words, the only action was that of the alcohol. J. B. DeLee, holding the chair of Obstetrics at the Northwestern University of Medicine, testified that years ago he gave large quantities of extractum viburnum prunifolium for the prevention of miscarriage, but found it useless (Journal A. M. A., April 22, 1916, p. 1338; May 13, 1916, p. 1566; May 20, 1916, p. 1639).

When Medicines Are Not Required or Are Useless. — Promoters of proprietary "uterine tonics" would have their preparations administered to girls and to pregnant women whether indicated or not and in conditions where medicines plainly can do no good. The testimony of E. E. Montgomery, professor of gynecology at Jefferson Medical College, Philadelphia, in the "Cardui" trial forcibly brings out the objections to the indiscriminate administration of medicines to girls and women and the futility of their use in cases which need surgical attention. Regarding the administration of "tonics" to girls at puberty he said that to advise a girl who is undergoing a physiological process that she must take some medicine which contains alcohol or any habit-forming drug at this period of her life, which is the most impressionable period of her existence, is doing that which is placing her future in peril, and is without any possible benefit. Regarding the administration of a "tonic," such as Wine of Cardui is supposed to be, he testied that it can do nothing but harm; that a woman because she is pregnant, pregnancy being a physiological process, does not need medicine, but needs attention. Regarding the use of medicines in uterine prolapse as a means of strengthening the unstriped muscle and thus to help the muscle to perform its work to hold the womb in place, Dr. Montgomery explained that the unstriped muscle in the woman is not likely to be affected by medicine and that the tissue outside the womb is unlikely to be affected by medicine; to give medicine in the case of a woman who has prolapsus is just about as reasonable as to bathe one's suspenders with a solution when the elastic tissue has been destroyed from them (Journal A. M. A., May 6, 1916, p. 1481).

Obituary.

Dr. Guy Marion Black.—Dr. Guy Marion Black, of Pocahontas, age 40, died at the home of his mother, Mrs. Flora Black, May 15, 1916. Dr. Black was never married. He is survived by his mother, three sisters and one brother. His father, the late John Black, and his uncle, Rufe Black, were leading members of the bar of Randolph County.

County Societies.

PULASKI COUNTY.

(Reported by Geo. B. Fletcher, See'y.)

The Pulaski County Medical Society met May 15, 1916, at 8:10 p. m. Present: Caldwell, Kirby, Snodgrass, Fletcher, Dooley, McCormack, Saxon, Carmichael, Gibson,, Dunaway, McCurry, Harris, Bond, Robinson, McRae, Pettus, Ogden, Judd, Zell and Day. Visitors: Fly, Young and Parmley.

Doctor Caldwell presented the case of a young man who fourteen years ago was kicked by a mule, causing loss of the right eye and a marked deformity of the nose. Empyema of both lachrymal sacs had developed. The sacs were dissected out and a piece of bone from the tibia was transplanted at the root of the nose in an attempt to correct the deformity as much as possible. The results were quite good, when his present condition is compared to that shown in the photographs taken prior to the operation. The doctor also exhibited a twenty-fie cent piece and a one-cent piece, both of which had been removed by esophagoscopy from different patients.

Dr. Carmichael made a further report of a case which he had previously reported, stating that after removal of the tonsils and adenoids there was marked improvement.

Doctor Caldwell, the essayist of the evening, read an interesting paper on "The Value of Examination of the Eye in General Diseases." The paper was discussed by Snodgrass, McCurry, Harris, Ogden, Kirby and Fletcher.

Dr. E. H. Wilkes was accepted, by transfer, as a member of this society from Ashley County.

A very important motion by Dr. Judd, seconded by Dr. Caldwell, to the effect that the "Library Committee" be instructed to look into the matter of buying a stereopticon, was carried.

The meeting adjourned at 9:45 to meet again, in regular session, May 29, 1916.

FRANKLIN COUNTY.

(Reported by Thos. Douglas, Sec'y.)

The Franklin County Medical Society met on April 4. Present were Doctors Post, Harrod, T. B. Blakely, J. P. Blakely, Blackburn, Williams, Davis, Warren, Downey and Douglas. Dr. Post presided. The program consisted of clinical reports. Dr. Warren reported some cases of pernicious malaria, and two cases of malarial hematura were reported, followed by the usual discussion on the use or non-use of quinine. This important point was brought out, viz: That in these cases death commonly occurs from profound adynamia, the patient gets up or is raised up and dies suddenly.

Book Reviews.

New and Nonofficial Remedies.—Containing descriptions of the articles which have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association prior to January 1, 1916. Published by the American Medical Association, 535 North Dearborn Street, Chicago. Price, postpaid, $1.00.

This book contains descriptions of the newer remedies that are worth the physician's consideration. Being issued by the Council on Pharmacy and Chemistry, which is composed of chemists, pharmacists, pharmacologists and clinicians of the highest standing, it is authoratative; in fact, it is recognized as the standard authority on the newer remedies. When besieged by too persistent detail men, many up-to-date physicians fortify themselves behind N. N. R., taking the stand that they cannot afford to waste time on any preparation which has not gained admittance to its pages.

In the second place, N. N. R. furnishes the physician who has learned how to use it with the answers to a great many perplexing questions that arise in the course of daily practice—and in many instances it is the only book which does furnish this information. What is the distinction between the action of acetylsalicylic acid (aspirin) and that of the other salcylates? What is the comparative toxicity of the various cocain substitutes? What manufacturers furnish Bulgarian bacillus preparations—medicinal foods—organ extracts? What is the iodin strength of the non-official organic compounds of iodin compared with the official iodids? What is the standing of pneumococcus vaccine—of the Schick test —of radium therapy? Look in N. N. R.; it is all there.

We believe that our readers in owning and consulting N. N. R. are not merely forwarding the worthy cause of therapeutic reform; they are but doing justice to themselves and their patients.

Candy Medication.—By Bernard Fantus, M. D., Professor of Pharmacology and Therapeutics, College of Medicine, University of Illinois, Chicago. Published by C. V. Mosby Company, St. Louis, Mo., 1915. Price, $1.00.

Among the eight chapters in this book will be found "The Uses of Sweet Tablets," "The Making of Sweet Tablets," "The Construction of Formulae for Sweet Tablets," choice of flavor, subduing of tastes, choice of color, etc. It is the author's hope that this booklet may lessen the difficulties experienced by the nurse and mother in giving medicament to the sick child, and help to make the doctor more popular with the little ones.

One swallow doesn't make a summer; and one test doesn't constitute a guarantee of satisfaction. There are always a number of aspects to every article of utility, and although it may measure splendidly up to one of these aspects, if it fails in all the rest it cannot be said to be a very efficient article. "Best by every test" is the measure of efficiency. That is the measure by which Calumet Baking Powder excels. Chemically, physically, physiologically and domestically, it fulfills all the demands of modern science and art. It is chemically correct, physically pure, physiologically wholesome, and domestically efficient and dependable. If you can think of any other quality that ought to characterize a first-class baking powder, no doubt the manufacturers will see to that, too. Personally, we can't. It looks to us as if a baking powder that can make good on those four claims is about as nearly perfect as a baking powder can be. However, you know the old proverb—"the proof of the pudding is in the eating of it." Calumet will stand that test, too.

THE JOURNAL OF THE Arkansas Medical Society

Owned and Published Monthly by the Arkansas Medical Society

VOLUME XIII
No. 2

LITTLE ROCK, JULY, 1916

Yearly Subscription $1.00
Single Copy 25c

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A Study of 180,000 Cases

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THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIII. LITTLE ROCK, ARK., JULY, 1916 No. 2

Original Articles.

NERVOUS DISEASES ASSOCIATED WITH PELVIC DISORDERS.*

By G. H. Moody, M. D.,
San Antonio, Texas.

Given a nervous or a mental patient in whom there is also present a disease of some other organ of the body, pelvic or otherwise, it is oftentimes difficult to say whether each disease has developed independently of the other. Many women have run almost the entire gauntlet of female diseases—both acute and chronic—and covering a period of many years without the development of one nervous symptom. Some develop serious nervous or mental symptoms upon the appearance of the slightest physical derangement, of either the pelvic organs or of other organs, and many develop mental or nervous derangement as independently of any existing female disease as if such female diseases did not exist, as is demonstrated by the fact that as many males as females develop the same mental and nervous derangements, presenting the same manifestations.

The similarity of the sum-total nervous symptoms as presented by a given individual when caused, or when not caused, by some other local disease of given severity, regardless of the organ which may be diseased, is common observation.

The original and acquired nervous endowment and stability of the individual is the question of first importance. Just as tuberculosis usually develops in those with a strumous diathesis, so also do nervous and mental derangements usually develop in those individuals with a neuropathic constitution. Just as any local disease will reduce the resistive force in a strumous individual and make the soil more favorable for the development of tuberculosis, just so will any local disease in a neurotic individual make more likely the development of a neurosis or a psychosis. If this local disease happens to be one of a female pelvic organ it will lay the foundation for the development of the nervous and mental derangement just as certain as will a local disease of any other organ of the body with equal severity and causing an equal amount of strain upon the nervous system, but not more so. The opinion is obsolete that there exists some unusual and incomprehensible chain of sympathy between the female pelvic organs and the mind. Hemorrhoids, an enlarge prostate, an epididimistis, a chronic appendicitis, a gastric ulcer, an astigmatism, or a chronic mastoiditis, if of a sufficient severity to cause the same disturbance of metabolism as a given case of ovaritis, salpingitis, or endo-metritis, or uterine displacement, will create the same amount, and probably the same kind, of nervous and mental symptoms in a given individual, and each condition should be removed when found to exist, if the patient's condition at the time is such as to warrant it, and if not, as soon as the patient can be put in a favorable condition. In fact, any pelvic disease should be corrected, if possible, just as should any disease of any other organ of the body, without reference to the question as to whether a nervous or mental disorder exists or not, in order to stop its drain upon the general health, provided in a neurotic individual, where a surgical operation or other heroic treatment is indicated, the nervous depression or instability is not so great as to precipitate an acute outbreak as often happens. Several cases have come under my observation where nervous and run down women become abrupty insane immediately following an operation, well performed, and in good surgical hands. A few cases, also, have been operated under my observation during an attack of insanity, neurasthenia, or hysteria, with the result of an intensification of the nervous symptoms, induced by the extra strain and shock made by the operation and anesthetic upon an already depressed nervous system. I have also seen more or less important operations made upon a diseased pelvic organ in

*Read before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2-3-4, 1916.

an excited, delirous or maniacal patient result in marked improvement, where the operation was followed by the patient being put to bed and absolute rest enforced, the same immediate improvement having been also observed in others, men as well as women, not requiring an operation, where absolute rest and proper care and attention were likewise enforced. I have also seen nervous and mentally deranged women, with diseased pelvic organs removed from their old surroundings, put to bed and given the rest treatment with its accompanying adjuvants and full nutrition, and restored to nervous and mental equilibrium and then operated with lasting and gratifying results.

These and other observations seem to justify the further opinion that it is important to look carefully to the time, and to the condition of the nervous health, strength and stability before submitting such patient to the ordeal of an operation or to other heroic treatment. When considering the significance of an existing pelvic disease in a nervous or insane patient, the exact diagnosis of the mental and nervous disorder is of much importance. Probably more in mental and nervous diseases than in any other class of diseases, is it true that in many cases the diagnosis determines positively the prognosis regardless of any kind of treatment. Paranoia, for instance, could be no more restored by operation, or by other means, than could idiocy, imbecility, general paresis, locomotor ataxia, etc., yet I have known of the ovaries having been removed in several young women suffering with paranoia with the hope of restoration. In parenthesis I would caution against confusing paranoid dementia praecox with paranoia. The mental symptoms are, to the inexperienced, quite similar in the beginning and sometimes for months, but the prognosis in paranoid dementia praecox, as well as in other forms of dementia praecox, is quite favorable.

I have also known of several cases of recurrent insanity who were operated on for some inter-current pelvic disease, such disease having appeared long after the beginning of the nervous attack, and upon the mental symptoms clearing up promptly in this attack just as in former attacks, the operation was thought to have cured the patient, until the next attack had had time to come around. I have even known of ovariotomy in congenital epileptics, where they happened to be girls. This procedure was all right from a standpoint of eugenics but bad for the prognostic and therapeutic value of the physician if he encouraged the hope of a cure.

In considering pelvic diseases as causative factors in diseases of the mind and nervous system, we must not forget to eliminate all such psychoses as the puerperal insanities, the lactational insanities, etc. These come under the head of infection, or exhaustion or toxic psychoses, and occur as frequently where no pelvic disease exists. In some women of a neuropathic constitution there occurs each menstrual period a neurosis or a psychosis of more or less seriousness, and it occurs in some when menstruation is temporarily suspended from any trivial cause, and in others during the entire course of pregnancy regularly at each time when menstruation should occur. The cause of the nervous derangement in these cases cannot be assigned to disease of a pelvic organ. It is merely due to the inability of the nervous system in these cases to withstand these things which, in a healthy individual, would constitute normal physiologic changes.

The psychoses and neuroses occurring around the involution period, are also eliminated. Menapause is not a disease condition but a normal physiologic epoch, as is also pubesence, but each marks a physiologic transition which, in neurotic individuals, may create considerable shock to the nervous system, many serious neuroses and insanities being precipitated at these periods of life, and those of puberty as frequently in males as in females, the climateric affecting men also, though perhaps not as markedly as women.

Masturbation in the female is no more due to pelvic disease than it is in the male. Where there is prepucial adhesions, or malposition or adhesions of the cliterus or of any external genitals, their correction is of greatest importance. Outside of these few instances of physical displacements and defects, masturbation in both sexes is a manifestation of a neuropathic condition and its existence can be assigned to a diseased ovary in the female no more than to a diseased testicle in the male, and the radical treatment by ovaritomy is justifiable in the same degree as is a sexualization in the male. In either, this procedure is claimed seldom to accomplish the purpose as a direct immediate result, but sometimes remotely by removing that normal instinct which has been perverted into an unhealthy and abnormal gratification by reason of the neuropathic constitution.

While discussing the relationship between these diseases, at least a brief reference should be made to the possible effects of mental and nervous diseases upon the female organs. This is a question which is receiving more consideration.

Just as a lack of insufficient muscular tonicity in the intestines may cause constipation, and as a lack of general muscular tonicity in nervous exhaustion may cause gastroptosis, gastric dilation, strabismus, splenic displacement, etc., so will it cause uterine and ovarian displacements, endometritis, etc., and local treatment of any of these conditions will not cure them. Amenorrhea is an almost universal accompaniment of an acute insanity and is secondary to the mental derangement and not due to pelvic derangement. Even in young girls, where the existence of a female derangement was known not to exist, endometritits, leucorrhea, swollen and misplaced ovaries, tubes and womb have been known to follow an acute exhaustion psychosis. In all of these conditions the treatment of the local disease is of importance quite secondary to those measures which restore the nervous exhaustion, conserve nervous force and re-establish normal nutrition.

DISCUSSION.

Dr. F. B. Young (Little Rock): Dr. Moody was kind enough to send me this paper before it was read, and I had an opportunity to study it. I want to say that it is a mighty good paper, and it was certainly well received by this meeting. I can add practically nothing to his exposition of the subject. There are a few points on which I disagree with the doctor; but, in the main, I believe he is in the right attitude. I do not believe that in his paper he presented sufficiently strong the infection-exhaustion psychoses, although he referred to them. I believe that the infection-exhaustion and the toxemic psychoses are practically all that come from the pelvis. Infection-exhaustion psychoses, such as those that come up following a delivery, are the main psychoses that we have to deal with in practice. The toxemic psychoses, such as come up before delivery, in pregnancy, are of much the same nature. The doctor has presented the subject thoroughly and so well that I do not feel that any further remarks on my part could add to the instruction of those present.

Dr. Moody (closing the discussion: The main points I wished to bring out in the discussion were: These people who are nervous, neurasthenics and run down generally imagine everything is wrong with them anyway, and it is not much trouble to get them in the notion for an operation, or to get them to believe very strongly that they ought to have an operation. I don't want to leave the impression that surgery in many of these cases is not a very excellent thing. I sometimes wish I were a surgeon, because it seems to me that the surgeons get more definite and more perceptible benefit from their work than any other class of physicians. Also, I do not believe that a surgeon will, as a rule, operate on a patient when he knows it is not necessary. But, I think, some surgeons seeing these cases so seldom, are calculated to become misled as to the importanec of any surgical interference. In that way they will sometimes subject a patient to an operation that is not called for.

There is nothing sadder, it seems to me, than some nervous patients we see who go around from one doctor to another practically begging sometimes for operations. Sometimes we find them with absolutely everything they have almost removed. And, when their ovaries are removed early, we know the distressing symptoms that sometimes follow an early climacteric.

As the doctor said, they have a depressed feeling and all that goes with it, and it puts the patient in a very miserable condition, and those around that patient, who have to deal with her the rest of their lives, are as miserable almost as she is.

Then, the whole sunuming up is, when an operation is necessary, independent of whether there is any nervous or mental derangement or not, that operation ought to be performed, I think the patient should be considered. Try to separate in your mind any relationship between the nervous condition and the physical derangement that happened to exist at the time. Then, if it seems advisable and necessary to operate, by all means it ought to be done, because those patients will not get well when they have some physical trouble draining on them to such an extent that they cannot build up.

THE DANGERS OF PATHOLOGICAL CONDITIONS.*

By R. L. Saxon, M. D.,
Little Rock.

In the process of evolution nature has endowed every normal cell in the human economy with the ability of appropriating such material as will be conducive to its own healthy growth and in most instances of preserving its individuality in the reproduction of itself. These characteristics are preserved with very similar processes as that which maintains the life and comforts of individuals in a great city. The human economy is but a vast community of individuals, each of whom is intensely interested in securing for himself the elements of nutrition necessary for his own comforts and growth. There is this difference: Upon the part of humanity each individual endeavors to appropriate the maximum of his capacity, even jeopardizing his neighbors' very existence, while nature has endowed the individual in the great city of our body with a less avaricious nature and each cell not only insists upon an equal distribution of the pabulum from the great hopper, but every one also insists upon assuming an equal share in the suffering of its fellow. We shall therefore speak of this cell system as one of communism, and let us suggest that its laws which regulate the supply for the reservoir or stomach are wonderfully efficient. Its demands will have no refusal when normally working. The process of separating, refining and distributing the useful or nutritive properties of this raw material has

*Read before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2-3-4, 1916.

no parallel within our experience for efficiency of purpose or complexity of detail.

We can estimate with tolerable accuracy the length and carrying capacity of our railway and waterway systems, can enumerate our telephones, measure the capacity and designate the termination of every electric wire within our cities, can specify every article which passes in or out of our commercial depots, but a like estimate of a very similar system within the compass of our body baffles our wisest observers.

If, during the ordinary course of events in municipal life, the toppling over of a great building, the dam of a great reservoir should break, or the employees of all transportation systems to the city should be affected whereby any number of individuals should be destroyed or be made to suffer we should designate it an economical disaster, and would ordinarily be able to adopt measures to avert a similar recurrence, would replace the destroyed property with better buildings, and replace the lost individual units with as useful citizens as they were. Analogously we may conceive a similar condition in this cell community, and would be enabled perhaps to perceive the same economic disaster as that which characterized the other, but in this instance we are pleased to call it a pathological condition.

Here the analogy ceases. In the former instance, destroyed individuals were replaced by others, capable of fulfilling every detail of usefulness that characterized his predecessor, but in this instance there is but one architect and he rebuilds with a uniformity of design and material that is often annoying to us.

As in the individual, the predominating trait of a cell is self-preservation, but since this is contingent upon a healthful condition of all his fellows, the entire system concentrates its attention upon bringing all avenues of distribution of nutrition. In doing this, the tissue most easily supplied with a maximum quality for defense is obtained—namely, fibrous cells. Easier supplied because of the greater source from which it may be derived. It may be derived from either of five sources: first, from fibroblasts; second, from lymph cells; third, from deteriorated muscle cells; fourth, by kereokynesis, and fifth, from organized fibrin. Because of its adaptability to environment and less complex nature, it is more resistant than the normal higher type cell and is therefore more efficient in repelling the invasion of noxious agents.

In every locality which experiences a destruction of its tissue there is at once established the process which properly assembles the material for the completion of this fibrous architecture. This process we designate an inflammation, the more elaborate details of which we are yet quite unfamiliar. The action of the nuclear or brain elements of these little bodies which builds with such accuracy of design and usefulness of purpose is yet mysterious to us. But when we contemplate the human system as a representative of the highest type of organization, as a community of individuals which enjoys the beneficial heritage of perhaps a million generations we would naturally presume that every individual cell has a special purpose or a useful function to perform. Its destruction therefore and its being supplanted with a new or inferior one is but a matter of expediency. This newly formed tissue is therefore abnormal. Nature has selected it, however, as the one which will most nearly adapt itself to her laws. Insofar as it will do this it is amenable to the same regulations as that which applies to the normal cells, but in many instances it passes beyond this control, and under such contingencies it becomes a dangerous tissue.

There is a unanimity of opinion amongst those whose theories are most prominent in accounting for malignant growths, that it never begins in normal tissue. The normal economy therefore seems to be able to divert every effort toward the propagation of such a growth. But how often have we observed these developments following old injuries or repeated irritations, in all of which there must have been more or less fibrosis. The character of fibrous tissue is such that it often prohibits the maintenance of proper nutrition to its own cells or the cells which it might encompass. It seems probable that this exigency with the assistance of the normal tissue ferment transforms the normal fibrous cell into one which assumes the character of a lower form or plant cell and which is capable of utilizing for itself the substance which proved inadequate for the sustenance of the fibrous cell, and hence by kereokynesis propagates itself indefinitely.

We may be and usually are pleased with the way in which nature has healed or filled an injury with a plastic wall of protection, but in every such instance there lurks some danger of this substance assuming a right of independence and thus will pass from under the benign influence of its protector and permit the ingress of malignant influences.

There are other dangers for which this material is often responsible. It is found producing mechanical disturbances engendered from its pulling or constricting nature and consequent squeezing to death of distant

areas or organs, obstructing the lumen of excretory or secretory channels, tying down or limiting normal body movements, etc. For some of the more apparent examples we might point to uterine flexions, hepatic cirrhosis, visceral adhesions, cystic ovaries and tubes, ureteral and urethral strictures with consequent damming back of urine, all of which may be traced primarily to the destruction of normal cellular material. Every injury of sufficient importance as to destroy the life of a community where it is not so extensive as to disorganize the entire system is therefore marked by the immigration of a new and distinct type of individuals whose requirements ordinarily do not go beyond the provisions made for the nourishment of their neighbors.

If the presence of this adventitious product is more obnoxious in some tissues than in others, nature seems unwilling to provide a substitute. Whether formed in the vascular walls affecting their resistancy and the consequent train of evils known as arteriosclerosis, upon the endocardium following the destructive effects of infective processes upon this membrane and where its tenacious traction destroys the delicate coaptation of the cardiac valves resulting in dreadful leaks within the hepatic tissues restraining its normal secretions and thereby contaminating the entire economy, or disseminated through the tissues of the kidneys the maintenance of whose normal excretory function are so highly important, its identity is always the same.

In our estimate, therefore, of nature's materials of repairing injury to animal tissue let us congratulate ourselves upon the fact that if we are far from perfect in dealing with the care of injuries, so is she.

We are reminded of the instance of Bill Arp, who when asked to make a rhyme upon the Hindoo, replied that—

The poor heathen Hindoo
Does the best he kindoo;
He always to the last
To his life clings fast,
And for pants makes his skin do.

In the lexicon of health there is no such word as "neutrality" against disease?

The death rate of persons under 45 is decreasing; of those over 45 it is increasing?

The U. S. Public Health Service has reduced malaria 60 per cent in some localities?

The death rate from typhoid fever in the United States has been cut in half since 1900?

The United State Public Health Service found 78 per cent of the rural homes in a certain county unprovided with sanitary conveniences of any kind?

REPORT OF A CASE — DISLOCATION OF THE ELEVENTH DORSAL VERTEBRA: FRACTURE OF THE TENTH, ELEVENTH AND TWELFTH SPINOUS PROCESS OF THE DORSAL VERTEBRA: PARALYSIS OF BOTH LEGS.*

By J. M. Lemons, M. D.,
Pine Bluff.

Alex Walker, age 35; family history, as usual, of the Negro race; teamster.

October 4, 1915, 7 a. m., I was called over phone at my residence by the foreman of shipping department, pine planer, Arkansas Short Leaf Lumber Company, Pine Bluff, Ark., saying he had a man hurt, but not seriously he did not think but "he says he can't stand up." I told the foreman to send the man on a stretcher to my office, which is within three blocks of the planer department, which the foreman did, and in fifteen minutes from the time the man was hurt he and I were at my office.

Statement of the man: There was a wagon loaded with lumber; it was his duty to move the wagon of lumber, and as usual he hitched his mule to wagon and got on top of load of lumber to drive same away, and load was under planer shed; it was his custom to ride on top of the lumber when moving loaded wagons from the planer shed, in which service he had been engaged for over a year. He had to pass under brace of planer shed, which the man says he had done thousands of times before; as the man and load of lumber were going under brace of shed the man stooped or ducked his head to pass under brace of shed, and just as his shoulders were under the brace the front end of the load of lumber tilted up, catching him between the lumber and the brace of the shed; the mule being quick and stout, pulled the load from under brace of shed; as soon as the man and lumber passed from under the brace, the man fell off of the load, which was about six feet, falling on tram floor. Some of the men noticed the man failed to get up, and they went to give him aid, and he told them he could not walk, but they lifted him up on his feet and found that he could not stand, the man claiming all the time he was dead from his waist down.

After patient was in my office I made an examination and found general paralysis from the superior spinous processes down, anteror and posteror. I sent patient to the Davis Hospital and had him watched very close; you gentlemen know how a Negro can

*Read before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2-3-4, 1916.

feign. I found retention of urine in continence of feces.

Received Davis Hospital, 8:45; pulse, 66; temperature, 97.8; respiration, 25.

At 5 p. m., pulse 86; temperature, 100; respiration, 23.

On October 5, had *x*-ray made by Dr. W. G. Pittman, which confirmed my diagnosis, dislocation of the eleventh dorsal vertebra, eleventh rib broken off at eleventh dorsal vertebra. On October 6, no improvement in patient. I called Dr. A. C. Jordan, and we operated; cutting down on spinous process, we found tenth, eleventh and twelfth processes fractured of tenth, eleventh and twelfth dorsal vertebra. Removed the broken fragment of spinous process tenth, eleventh and twelfth dorsal vertebra.

On removing spinous process of eleventh dorsal vertebra we found the body of eleventh dorsal vertebra fractured, which necessitated the removal of half of the eleventh dorsal vertebra; when removed we, of course, exposed the spinal cord, found blood clot on the cord, and found the cord masuated; we opened the sheath of the cord and found blood clot, removed same and let some of the spinal fluid escape; sewed up the sheath of the cord with fine silk, closed wound, with drainage, using catgut and silk worm sutures; wound healed by first intention and in four weeks after injury sensation began to return in the right thigh; two weeks later in the left thigh; sensation moved down very slowly in both legs; now passed finger slowly on bottom of feet, toes will respond slightly; by January 1, 1916, sensation had returned in both legs.

October 25, began to void urine; November 15, began to have some control over bowels, and now patient has very good control over bladder and bowels; patient very cheerful all the time, and now goes around in a buggy and propelling chair; has no control of his legs; time will only tell the outcome.

DISCUSSION.

Dr. Dorr (Batesville): I want to thank the doctor for his paper. He was kind enough to send me a copy of it. I think that the operation was justified; the results show that; not only in particular as to the functions, but his patient is alive. My experience with this line of cases is very limited, and I suppose every doctor who does surgery is that way. There may be some in the city with whom it is different. But, I think the operation of laminectomy as clearly indicated where you have compression of the spinal cord, as trephining where you have compression of the brain. It is further indicated, because the *x*-ray won't make the diagnosis for you. nor will the reflexes make it, in all cases. For that reason, it is justifiable, as an exploratory laparotomy would be. And, if these operations were done early, and the man had more experience than we have. Take a man like me; I have had no experience, you might say. I may have seen two cases in a lifetime—but, for somebody who did have the experience, you will find that the results will be just as good and the indications will be just as strong, and anyone, I am sure, will be convinced that an early operation is the thing to do, because you cannot make a correct diagnosis in any other way.

I want to thank the doctor because he did not quote a lot of authorities, simply because he just reported his case for what was in it. I want to mention one point, treatment that is suggested by the *x*-ray. I got this from the Journal. This is absolutely in quotation marks; so, if there is anything wrong about it, it is on the other fellow:

"Bonnus gives the details of eleven cases in which he used Roentgen therapy for spastic affections of the spinal cord resulting from war wounds. He used a filter 1mm. thick, and the distance of the anticathode from the skin was never more than 15 cm. One to one and one-half H. was applied at the lesion. The number of applications varied from six to nine for each patient, one a week being given. Sometimes quite pronounced effects were observed after the first treatment. The results were best in the injuries of the cervical cord and poorest in the lumbar cord, though there was improvement in all cases.

"The poorer results in the lumbar cord may have been due partly to defective technique, as these were the first cases treated, but partly doubtless to the greater amount of exudate, as the spinal canal is larger in the lumbra region. The time since the injuries varied from two to eleven months, and in none of the cases was there any teudency to spontaneous recovery before the application of radio-therapy. There was improvement not only in the spastic phenomena, but in the intense pain caused by inflammation of the nerve-roots. He has also had good results in the treatment of painful neuritis of the median with radio-therapy."—(A Goss.)

Dr. W. A. Snodgrass (Little Rock): I want to thank the doctor for presenting this case. I don't like to tell my experience with fractures of the spine. Dr. Dorr said that probably he has seen two cases in a lifetime. I haven't been as fortunate as he has. I perhaps had something to do with as many as twenty cases in my life, and I am nothing like as old a doctor as Dr. Dorr. But, the results that Dr. Lemons had in this case are certainly very gratifying. I believe that he would have gotten quicker results if that laminectomy had been done a few days earlier. I think we should do a laminectomy in injuries to the spine just as quick as we make a diagnosis, and we ought to make a diagnosis immediately after the injury, if possible, just like we would in cases of fracture of the skull. The majority of these patients don't die primarily from degeneration of the cord or from the shock of the injury; but they die from septic infection. I would like very much for the doctor in his rejoinder to give me some instructions on how to keep this area clean after the operation is performed, and the best method of preventing bed sores and other complications. Unfortunately, I have lost most of my cases from septic infection, and have had them in hospitals, and I have tried all the methods that I know for protecting the dependent parts and preventing infection, and at the present time I am unable to advise anybody how to take care of a man with a fracture of the spine.

Dr. W. R. Brooksher (Fort Smith): I appreciated the paper by Dr. Lemons. I think it extremely timely. I want to go Dr. Snodgrass one better in the statement that he made that an injury to the spine should be operated on as quickly as an injury to the brain. I think it should be operated on quicker, if you are certain about your diagnosis, because your results are going to be better, if you get any results at all. If you don't get any results you are not going to injure your patient. The results of these injuries are so

extremely bad, if the spiual cord is cut in two, or you have a rupture, that you cannot make your patient any worse; and you fiud that the quicker you get that pressure off of the nerves, the quicker you are going to avoid spinal degeneration, aud the better the prospects of your patient are going to be.

The nerves, as you all know, degenerate when they are separated from the nutritive centers. The nutritive center of the sensory nerves of the spinal cord is in the brain, I think. The nutritive center of the motor nerves is in the gangloin. So, that your only hope iu these cases is to get down and relieve that pressure before the nerves degenerate beyond the point of pressure. When your sensory nerves degenerate beyond that point, hope for your patient is absolutely gone. If you can get down there and relieve that pressure before these nerves degenerate, and the nerves are not separated or cut iu two, your patient has got a chance to get well.

I think, with Dr. Dorr and Dr. Snodgrass, that the operatiou should be performed as soon as your diagnosis is made. If you have, as I said awhile ago, separation of the nerves, the operation is absolutely goiug to be hopeless, but your patient's condition is already hopeless. But, you don't know for sure that there is complete separation. In other words, you cannot make a clinical diagnosis between complete separation of the fibers of the cord and the loss of function from compression. So, I say, give the patient the benefit of the doubt, and get down there and get down there quickly, and of course, cleanly. I believe that surgery of the spinal cord is in its infancy. I believe we are going to do better. I believe a good many patients have been allowed to drag out a miserable existence, because we didn't have quite nerve enough to get down there and take off a lamina and relieve the pressure.

We have in the *x*-ray a great aid, and a person who is fortunate enough to put his patient under that can make a diagnosis and see whether there is a fracture or not.

You cannot always make a diagnosis when the loss of function is due to pressure, because you may have pressure from extravasation of blood, or from some other condition. But, if you have a clinical condition of loss of function from either pressure or fractured bone, displaced vertebra, or some other source, if that stays there long enough, you are going to have a loss of degeneration in those nerves, and you will have a permanent paralytic. You can't do very much harm to get down in there, if you are a competent surgeon and have the facilities for doing good, clean work; you are not going to do that patieut very much harm if he hasn't got a fracture. And, if he has got one, you give him his only chance to get well.

Dr. F. B. Young (Little Rock): I think the doctor's course was thoroughly justifiable in going down; his results show that in this particular case it was, and that we should always operate early, and give the patient the benefit of the doubt in these cases. If you have a destruction of the tissues of the cord, you will not get a regeneration. If you have compression only, from hemorrhage or from a misplaced bone or something of that kind, you will get a complete recovery.

Dr. Preston Hunt (Texarkana): Injuries to the spinal column and cord, I think, are just entering the infant stage of surgery, with regard to treatment, as suggested by some one. I have had considerable experience with injured cords. My greatest difficulty is to know to what extent the cord is injured. I have been too timorous, possibly, in some cases, or, at least, not sufficiently bold to enter freely, and those that I have entered, I fear I have been a little backward in making a sufficient exploration.

My experience along that line has been that the death rate or mortality was such that I didn't feel like opening up. I notice that most of my cases seem to die from a purulent cystitis.

I feel that we may be bold enough to opeu up possibly two or three laminae without danger. There are so many things that may produce pressure, such as the result of extravasation of blood or serum, where we would possibly save some of our patients by opening freely. I don't feel that we will get as good results in this line as we get in brain surgery, not at present. Possibly we may develop operations and make iuvestigations along that line, but upon us rests the responsibility of becoming pioneers along this line of surgery, and securing the results we hope for.

Dr. Lemous (closiug the discussion): I thank the gentlemen very courteously for what they have said about this short paper. In regard to the doctor wanting to know about a bed sore, if I had gone into the full details of this case, of course, it would have taken me something like three hours. I had a bed sore, doctor, I am sorry to say, but we healed that up.

Now, then, I want to say this just in a general way, talking about having the nerve to go down. I wanted to go down in thirty minutes after I got the man to the hospital; but, gentlemen, I had to wait until I got a decision from the insurance company before I could go down. I want you to know that is the reason why the operation was delayed as long as it was. I told our general manager in an hour after the operation: "There is but one thing to do—to cut down and see what we have got." So, when I got authority to do so, I did that, and I told you what I found.

I appreciate very much the courtesy and the kindness in which this paper has been received.

Physieal training in ehildhood is the foundation of adult health?

Bullets may kill thousands, flies tens of thousands?

Headaehe is Nature's warning that the human machine is running badly?

Isolation is the most effieient means of eontrolling leprosy?

Eezema is said to seldom appear in infants whose milk is diluted with lime water.

All questions will be cheerfully answered by Dr. J. M. Bodenheimer, secretary-treasurer, Shreveport, La.

The titles of essays must be in the offiee of the seeretary not later than December 10, 1916.

H. C. Wallaee (Am. Jour. Clin. Med.) reports a case of poisoning from wearing a belladonna plaster two months.—The Medical World.

In looking for the eause of septie infeetion, do not forget the teeth, the nose, its various sinuses and eells, the ear, the tear sae, the appendix, the gall-bladder, or even an ingrowing toe nail.—Clark, Ill. Med. Jour.

THE JOURNAL
OF THE
Arkansas Medical Society

Owned and controlled by the Arkansas Medical Society and published under the direction of the Council.

DR. WILLIAM R. BATHURST, Editor.

PUBLISHED MONTHLY. Price, $1.00 a Year in Advance. Single Copies, 25 Cents.

Entered as second-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under Act of Congress of March 3, 1879.

All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Address:
The Journal of the Arkansas Medical Society,
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Little Rock, Ark.

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Editorials.

TECHNICALLY GUILTY — MORALLY JUSTIFIED.

A little after 10 p. m., Thursday, June 22, and after being out nearly a week, the jury in the Wine of Cardui case brought in a verdict for the plaintiff and assessed the damages at 1 cent. The Chattanooga Medicine Company charged the American Medical Association with having libeled it when The Journal declared, among other things, that the business had been built on deceit, and that Wine of Cardui was a vicious fraud. For this alleged libel it asked that it be given $100,000; it was given $0.01. As most of our readers remember, two suits were originally brought against the Association and the Editor of The Journal. One was a personal suit for $200,000, brought by John A. Patten, formerly chief owner of the Chattanooga Medicine Company; the other was a partnership suit for $100,000, brought by John A. Patten and his brother, Z. C. Patten, Jr., doing business as the Chattanooga Medicine Company. The suits were based on two articles that apeared in The Journal, April 11, 1914, and July 18, 1914, respectively. The cases came to trial March 21, 1916. On April 26, in the middle of the trial, John A. Patten died, and the personal suit was automatically abated. The partnership suit, however, was continued and this case went to the jury Friday, June 16. The case is by far the most important of its kind that has ever been tried. In addition to 498 deposition which the "patent medicine" concern took through the South from women and from doctors of a certain type, the company also put 97 witnesses on the stand to testify in its behalf. The American Medical Association took only 8 deposition, but did put on the stand 93 witnesses, among whom were some of the best known physicians in the country. The trial and the facts that led up to it could furnish texts for many interesting comments. The spectacle of a scientific organization, in its attempt to safeguard the public health, having to assume responsibilities that rightfully belong to state or federal agencies, is but one of several anomalies that characterize this case. Viewing all the facts in the case and remembering the heavy damages asked by the plaintiff, the medical profession may interpret the verdict thus: Technically guilty; morally justified! To the Association a moral triumph; to the "patent medicine" interests a Pyrrhic victory.—Journal of the American Medical Association.

AN INCIDENT IN THE WINE OF CARDUI CASE.

Several physicians from the South testified as witnesses for the American Medical Association in the Wine of Cardui case. In many instances, necessarily, the evidence dealt with the case-histories of certain patients. In order to protect these patients from any publicity, the physicians who testified specially requested that the names of the patients need not be given in open court. To this the court agreed, holding that the names should be given in confidence to the lawyers for the manufacturers of Wine of Cardui. Soon after some of these Southern physicians reached home they reported that statements had been made by strangers to some of these women and their relatives that their names had been made public and serious reflections had been made upon their reputations in court. The natural result of these statements, by whomsoever circulated, has been to create local prejudice against the physicians who testified. Some of these physicans declare that they have been in danger of bodily violence and have been put in a false and unenviable light in their communities. The court, on having this matter brought to his attention, made a statement relative to it which becomes part of the record of the case, to the effect that except in one instance with the consent of the patient, no names were openly given in court.

MEDICAL PROBLEMS.

In his President's address before the American Medical Association at Detroit, Rupert Blue, Washington, D. C. (Journal A. M. A., June 17, 1916), after noticing the deaths of Drs. Trudeau, Rodman and Favill, emmerates and discusses some of the larger problems of the medical profession. The raising of the standards of medical and sanitary education has been one of the problems of the Association since its inception, and especially of late years. Certain questions, however, have come before us which need more special attention at the present time. Such are the teaching of sanitary subjects in the undergraduate and postgraduate courses and the time is at hand when localities and states will be demanding full time health officers and he sugests that the Council on Medical Education and the profession generally give greater heed to this growing need. The medical department of the army has the duty of preserving the sanitary conditions of our forces, together with certain important functions of administration and organization. From 30,000 to 50,000 young men join the army each year and a similar number annually pass back to civil life. The great lesson of the European war for us as medical men to take to heart is to prepare the medical and sanitary forces in time of peace, both in the army and in the navy, and every assistance in its power should be given by the Association to the authorities of both services. Dr. Blue also speaks of the necessity of the enlargement of the usefulness of hospitals, to increase their efficiency and their utilization in the relief of illness and render them of greater utility in times of distress. The efforts to determine the availability and use of remedial preparations must not be relaxed and the enforcement of the law concerning the preparation and sale of viruses, serums and toxins must be aided. Research should be encouraged and practitioners generally aid in the enforcement of the antinarcotic laws which, it is doubtful, are fully appreciated as regards their importance. The subject of health insurance is coming to the front and will probably constitute one of the next great steps in social legislation. Closely allied to this is the study of industrial hygiene and we should consider this problem as it relates not only to the workshop and factory, but also to the home. Rural sanitation is a matter of even greater importance, and the next great point of attack against infectious diseases is in the small town and village. This requires the sanitary enlightenment of the country inhabitant and the need of adequate state and local health organizations is more and more evident. The defects, however, are being remedied and many states are rapidly approaching a high degree of efficiency in their public health administrations. It is important that states and localities should be able to secure the services of sanitarians without reference to legal residence and equally as important that medical hygienists, as well as physicians generally, should be able to practice their profession anywhere within the confines of our country without undue restriction. The great effort of the future must be in the direction of the improvement of the internal health of the nation. We have an adequate coast defense against disease from abroad, and what we must now do is to control those diseases which are already with us. For this we require the qualified health officer and an educated public.

Abstracts.

IDEALS IN DIAGNOSIS.

Mitral stenosis is due to a typical streptococcosis of the heart. It occurs in youth because of the age of vascularity, 61 per cent occurring in young girls. Autopsies bear out the statement that mitral stenosis is *always* accompanied my mitral regurgitation, even though a systolic murmur can not be demonstrated; therefore, mitral disease is primarily *stenosis*. The critical time is before the twenty-first year, after which the prognosis for a long life with a crippled heart is increasingly better, provided there is not a constantly recurring reinfection from diseased tonsils, pyorrhea alveolaris, sinus and mastoid disease, or some other focus of infection. It is only in the presence of infection that mitral stenosis breaks down the musculature of the heart, myocarditis is a secondary condition.

Arrhythmia occurs late in all cases of mitral stenosis, but arrhythmia is of serious consequence only when perpetual or when exaggerated after exercise. Mitral stenosis may be latent and symptomless; a safe working basis upon which to proceed is that in the absence of all other signs of heart disease, and *in the absence of recent infection*, a murmur must be considered functional. Functional murmurs are systolic in time, and are usually loudest at the base. Before the diagnosis of valvular disease with mitral regurgitation can be tenable, there must be a systolic murmur at the apex, an accentuated pulmonic second sound, and hypertrophy, as evidenced by displacement of the apex to the left, the degree of hypertrophy being determined by the degree of apex displacement.

The point furthest down and out at which the apex impulse can be felt corresponds to the size of the heart, remembering that the area of dullness extends three-quarters of an inch beyond the point of maximum impulse. In debilitated persons, the mid-clavicular line is a better guide than the nipple line; in children up to fourteen years, the normal apex may be half an inch external to the nipple and on a level with it.

The diagnosis of mitral stenosis rests upon a sharp first sound at the apex, an accented and doubled pulmonic second sound, a presystolic murmur, and a localized presystolic thrill at the apex, and a big heart. Hypertrophy in mitral disease extends outward, while hypertrophy in aortic extends downward from the nipple. In mitral disease before there is a murmur (and, therefore, when discoverable, the first sign of mitral disease), there is a sharp tapping first sound at the apex.

* * * * *

In examination of the lungs one must have something definite in mind to look for—remembering that quality in breathing is difficult to interpret. Breathing has three qualities—piteh, duration and intensity. During the first stage of tuberculosis, which is the formation of the tubercle, there are no discoverable signs. In the next stage the character of inspiration shows a higher piteh and broncho-vesicular breathing of the first type; this much is quite sufficient for suspicion, and, when coupled with tired feeling, muscular weakness, morning hoarseness, and perhaps loss of weight, justifies a tentative diagnosis of incipient tuberculosis. In the third stage the character of the expiration shows a higher piteh and increase in duration, constituting broncho-vesicular breathing of the second type.

This disease may be present without surface evidence, or it may announce itself by a sudden hemorrhage. The *slight* changes point the way in early diagnosis, not the cracked-pot sound and bacilli in the sputum. The microscope should be discarded except to confirm. *Likewise tuberculin in the adult has no place in diagnosis.* Rales, to be of consequence, must be persistent over a given area. When tuberculosis is discoverable in one apex it is very probably present in both.

When a patient has a dyspepsia of unknown origin, loss of appetite, loss of weight, sudden muscular weakness of unknown origin, cough of one month duration, hoarseness unaccounted for, occasional night sweats and shortness of breath, these signs should excite suspician of tuberculosis.—C. R. Bird, Lancet-Clinic.

BISMUTH PASTE.

Emil G. Beck, Chicago (Journal A. M. A., July 1, 1916), has gathered the published statistics of the use of bismuth paste in the cure of suppurative sinuses and abscess cavities within the last ten years, and gives them in tabulated form, with the exception of 319 nose and throat cases, which he excludes from his present consideration. The series of 527 cases from a very wide range of authorities gives an average of 80.64 per cent of cures, with a minimum of 12.5 and a maximum of 100 per cent. Both the minimal and maximal averages occur with the smallest number of cases and might be considered less significant on that account. To ascertain the lack of uniformity shown, he has observed and conferred with other surgeons in their clinics and come to the conclusion that faulty technic is the chief cause of failure to cure. A suppurating sinus is only a contracted abscess cavity and when the small abscesses lock themselves off they empty in different regions, thus explaining the multiplicity of openings. About 20 per cent of all cases of diagnosed rectal fistulas are only tuberculosis sinuses resulting from spinal, hip joint or intra-pelvic abscess, and Beck reports cases illustrating this fact. In using the bismuth method of treatment we have two advantages: It helps to avoid useless operations and gives results without operation. He describes his modus operandi, which consists of injecting a quantity of bismuth paste liquefied by heating in a water bath, and composed of bismuth subnitrate, 30 parts, and yellow petrolatum, 70 parts, into the opening of sinus until one is reasonably certain that all ramifications are filled. It will rapidly thicken and remain in the sinuses, permitting one to take a roentgenogram. When a sinus is very long and tortuous, the paste should be injected in a liquid state, so that it will flow readily into every part of the tract. If there is more than one opening, the paste is liable to escape from the nearest one and thus miss the remaining channels. To avoid this technical error, the mouths of all other sinuses should be compressed by an assistant, by placing the finger tips against these openings, so that the liquid will flow in other directions, filling up all channels of the sinuses. It is essential that every crevice should be filled at one injection; otherwise there will be a recurrence of suppuration. An example is given showing how a faulty technic made the physician miss the focus of infection. The common technical errors are insufficient mixing of the bismuth with the petrolatum so as to leave small lumps, insufficient heating, use of improper instruments, injecting with undue force and

the most common error is incomplete filling of the complete sinus tract. Too frequent injections and not giving the paste sufficient time to do the work and allowing the patient to dress the wound himself are also causes of failure. Complete directions as to the proper procedure including the preliminary roentgenization and bacteriologic examinations are also given.

Personals and News Items.

Dr. and Mrs. A. E. Cox, of Helena, have returned from Detroit and Chicago.

Dr. and Mrs. William R. Bathurst have returned from Detroit and New York City.

Dr. and Mrs. T. E. Fuller, of Texarkana, have returned from the North and East.

Dr. H. E. Pinkerton has moved from Cotter, Ark., to Jefferson City, Mo.

Dr. L. D. Reagan, Little Rock, has been appointed assistant district and hospital surgeon for the C., R. I. & P. R. R.

Dr. J. P. Runyan, Little Rock, has been appointed district and hospital surgeon for the Rock Island lines.

Dr. J. R. Davis has been elected president and G. P. Dumman secretary of the Polk County Medical Society.

Dr. and Mrs. C. R. Shinault and daughter, Josephine, will spend the summer at Horn Springs, Tenn.

Dr. L. A. Cook, of London, who was secretary of the Johnson County Medical Society for a number of years, is in New Mexico for his health.

The Tenth Councilor District Medical Society will meet at Booneville in September, at which time the unveiling of the J. S. Shibley Memorial Tablet and dedication of the Echols Memorial Cottage will take place.

The Library of the University of Arkansas Medical Department would like any back numbers of the Journal of the American Medical Asociation, Annals of Surgery, or any other high-class medical magazine to complete their files.

Arkansas physicians visiting in Little Rock during the past month include: Samuel D. Kirkland, Van Buren; H. Castle, Winchester; W. E. Bollenger, Plainview; B. V. Powell, Reader; J. W. McDonald, Malvern; J. B. Crawford, Benton; Harry Williams, Jr., and W. G. Pittman, Pine Bluff; E. T. Bramlit, Malvern; Frank P. Hardy, Center Hill.

Dr. G. K. Stephens, of Newport, reports that he has had stolen from his office one Spencer microscope, one eye piece and three objectives. Any information pertaining to these articles will be appreciated by Dr. Stephens.

Announcement is made that Professor August von Wassermann, head of the Institut fur Infectionskrankheiten in Berlin, will become the Director of the Institut fur Experimentelle Therapie at Frankfort. To be chosen as successor to Paul Ehrlich is indeed an honor, but, in this case, one which is richly deserved.

The County Secretary above all others in the society can make the society work interesting and arrange good meetings for the society. So if your county is not having good live meetings and interesting programs and meeting regularly you may need a new secretary.

THE DETROIT MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

The Detroit session of the American Medical Association was most successful, both in attendance and in scientific work. All the sections report unusually excellent papers and instructive and practical discussions. Detroit was generous in supplying automobiles for the transportation of physicians in attendance; most of the automobile manufacturers supplied cars and the local profession as well as the citizens of Detroit gave the use of their cars freely. In spite of the fact that the meeting places were scattered, physicians had no difficulty in going from one meeting to another. It was said that the same political engineering of candidates for the chief offices was in evidence, resulting in the selection of a worthy candidate for president. The House of Delegates had many matters for consideration, notably among which were the determination to have a speaker of the House of Delegates and the unanimous approval of the National Board of Medical Examiners.

Dr. Alexander R. Craig, of Chicago, secretary, reported the membership as 78,301, a gain of 2,300 during the year.

Arkansas physicians in attendance were: C. P. Meriwether, Wm. R. Bathurst, Morgan Smith, Little Rock; D. W. Goldstein, St. Cloud Cooper, Fort Smith; W. V. Laws, Loyd Thompson, Hot Springs; R. H. Huntington, Eureka Springs; A. E. Cox, Helena, and Paul Dickson, Paragould.

The following officers were elected: President, Dr. Charles H. Mayo, Rochester, Minn.; First Vice President, Dr. Lewellyn F. Barker, Baltimore, Md.; Second Vice President, Dr. John Leeming, Chicago, Ill.; Third Vice President, Dr. J. Henry Carstens, Detroit, Mich.;

Fourth Vice President, Dr. George F. Keiper, Lafayette, Ind.; Secretary, Dr. Alexander R. Craig, Chicago, Ill.; Treasurer, Dr. William Allen Pusey, Chicago, Ill.; Chairman of the House of Delegates, Dr. Hubert Work, of Colorado; Vice Chairman of the House of Delegates, Dr. Dwight H. Murry, New York; Board of Trustees, Dr. A. R. Mitchell, Nebraska, Dr. E. J. McKnight, Connecticut, Dr. Oscar Dowling, Louisiana.

The next meeting will be held in New York City.

NATIONAL BOARD OF MEDICAL EXAMINERS.

The date of the first examination of the National Board of Medical Examiners will begin October 16, 1916, at the Army Medical Museum, Washington, D. C., and will cover a period of one week.

Candidates who have been successful in passing the examination and are approved by the board will be granted certificates. This certificate is not a license to practice medicine, nor does it exempt the holder thereof from complying with the legal requirements of the states in which they desire to practice; but it will be evidence of high attainment in the medical knowledge, and will, the board believes, soon be accepted by the state boards as evidence of qualification for licensure.

No charge will be made for the examination itself, but a registration fee of five dollars ($5.00) will be required. Further particulars can be had by writing to the secretary, Dr. J. S. Rodman, 2106 Walnut Street, Philadelphia, Pa.

EXAMINATION FOR THE MEDICAL CORPS OF THE NAVY.

The next examination for appointment in the Medical Corps of the Navy will be held on or about August 7, 1916, at Washington, D. C.

Applicants must be citizens of the United States and must submit satisfactory evidence of preliminary education and medical education.

The first stage of the examination is for appointment as assistant surgeon in the Medical Reserve Corps, and embraces the following subjects: (a) anatomy, (b) physiology, (c) materia medica and therapeutics, (d) general medicine, (e) general surgery, (f) obstetrics.

The successful candidate then attends the course of instruction at the Naval Medical School, which will begin on or about October 1, 1916. During this course he receives a salary of $2,000 per annum, with allowances for quarters, heat, and light, and at the end of the course, if he successfully passes an examination in the subjects taught in the school, he is commissioned an assistant surgeon in the Navy to fill a vacancy.

Full information with regard to the physical and professional examinations, with instructions how to submit formal application, may be obtained by addressing the Surgeon General of the Navy, Navy Department, Washington, D. C.

A VALUABLE NEW CATALOGUE.

Parke, Davis & Co. announce the publication of their 1916 price list, which is said to be an improvement in many respects over any previous issue of this valuable catalogue. The book is divided into three parts: Part 1—Fluid Extracts, Pills, Elixirs, Syrups, Tablets, etc.; Part 2—Specialties, into which have been merged Special Preparations; Part 3—Biological Products. The nomeclature of the U. S. P., Ninth Revision, has been adopted in the new list, the term "milliliter" ("mil") being substituted for the cumbersome "cubic centimeter." The standards of the new U. S. P. applying to fluid, solid and powdered extracts and tinctures, together with the doses, have also been adopted. All Harrison-act items (products that must be ordered on official order forms) are clearly distinguished. Its amplitude, its handy classification, its comprehensive general index, all serve to make the new catalogue a reference book of the utmost value to medical practitioners. We understand that the book will be ready for distribution about August 1. Physicians are advised to write for a copy, addressing their requests to Parke, Davis & Co., Detroit, Mich.

DO YOU KNOW THAT—

Light promotes cleanliness?

Better wages make better health?

Better health makes better citizens?

Better citizens make a better nation?

Hookworm enters through the skin?

Obesity menaces longevity?

It's worry, not work, which shortens life?

Poor health is expensive?

Flyless town has few funerals?

A clean mouth is essential to good health?

Cholera is spread in the same manner as typhoid fever?

Scarlet fever kills over 10,000 Americans each year?

New and Nonofficial Remedies.

Enteric Coated Glycotauro Tablets.—Each tablet contains glycotauro 2 grains and is coated with salol. Hynson, Westcott & Co., Baltimore, Md.

Petroagar.—Each 100 gm. contains petrolatum .72gm., aga .22gm., with powdered licoriee, cocoa and oil of anise sufficient to flavor. H. C. Merker Co., Chicago, Ill.

Petrobran.—Each 100 gm. contains petrolatum .74gm., bran .22gm., with powdered licorice and "oil of pineapple" (ethyl butyrate) sufficient to flavor. H. C. Merker Co., Chicago, Ill. (Jour. A. M. A., June 10, 1916, p. 1857).

Propaganda for Reform.

Ichthyol.—The American agent for ichthyol—the sole importer—announces that his supply of ichthyol is exhausted. As fraudulent substitutes are offered for sale, this state of affairs should be known to physicians (Jour. A. M. A., May 27, 1916, p. 1734).

A Case of Beta-Eucain Poisoning.—T. G. Orr, Kansas City, Mo., reports a case of beta-eucain poisoning. Toxic symptoms appeared after an operation in which 3 ounces of a 25 per cent beta-eucain hydrochloride was used for the local anesthesia. After the toxic symptoms have completely disappeared, the patient died suddenly five days later. Necropsy showed an embolus in the left coronary artery (Jour. A. M. A., June 10, 1916, p. 1857).

Efficiency and Nontoxity of "Arsenobenzol.—Udo J. Wile,, Ann Arbor, Mich., reports that during the last six months 612 injections of "Aresnobenzol" from the Philadelphia Polyclinic have been administered at the University of Michigan Hospital. Wile concludes that the immediate therapeutic results from the use of Arsenobenzol are fully as good as those following the use of Salvarsan, and that, given with proper precaution, the drug has shown itself fully as little toxic as Salvarsan. The conclusions refer to intraspinal medication as well as to intravenous (Jour. A. M. A., June 10, 1916, p. 1880).

Vaccine Treatment.—Hektoen (Jour. A. M. A., May 20, 1916, p. 1591) traces the stages by which vaccines, which were first employed with attempted scientific control, have come into indiscriminate and unrestrained use, with no guide beyond the statements which commercial vaccine makers are pleased to furnish with their wares. Already most physicians are realizing that the many claims made for vaccines are not borne out by facts, and that judging from practical results there is something fundamentally wrong with the method as at present so widely practiced. As clearly shown by Hektoen, "the simple fact is that we have no reliable evidence to show that vaccine as used commonly, have the uniformly prompt and specific curative effects proclaimed by optimistic enthusiasts and especially by certain vaccine makers, who manifestly have not been safe guides to the principles of successful and rational therapeutics" (Jour. A. M. A., May 20, 1916, p. 1625).

Nonspecific Treatment of Disease.—Evidence is accumulating that certain therapeutic effects ascribed to specific treatment with vaccines or serums, have been due to non-specific effects produced by these preparations. Jobling and Peterson (Jour. A. M. A., June 3, 1916, p. 1734) review the evidence along these lines. They conclude that too much reliance has been given to the idea of specificity and that we have refused to consider evidence of nonspecific therapeutic results. We should, however, not cast aside all ideas of specificity in disease, a conception which has been the foundation of vaccine therapy. Miller and Lusk (Jour. A. M. A., June 3, 1916, p. 1756) in a paper dealing with one phase of nonspecific therapy, report improvement in cases suffering from arthritis following intravenous injection of typhoid vaccine. It would be of interest to know how permanent the improvement was and in how many cases the cause of the arthritis was found and removed. Also, we must bear in mind the query of Theobald Smith: How much energy does a reaction of this sort cost the patient, and is the final result worth the cost? (Jour. A. M. A., June 3, 1916, p. 1784.)

English Prescriptions. — Bernhard Fantus, professor of pharmacology and therapeutics, University of Illinois School of Medicine, favors the abandonment of the so-called "Latin" prescription. He holds that the usual arguments in favor of the "Latin" prescription are fallacious and points out the advantages of the use of English. He concludes: "By far the most important reason for writing prescriptions in English lies in the difficulty medical students have in learning the Latin form. To the student prescription writing is a bugbear. When one thinks of the crowded medical curriculum and the comparatively small number of hours set aside for pharmacology and therapeutics, it seems a pity to waste any of it on the acquiring of an antiquated form of expression." In regard to the claim that Latin prescriptions guard the patient from knowledge which might be prejudicial, he replies: "Inasmuch as it is the popular opinion that doctors use

Latin prescription writing to keep the laity in ignorance for selfish ends, it seems high time that we antagonize this idea; and we can do this most emphatically by using English. This we can also do with perfect safety, for secrecy is very rarely, if ever, essential in the practice of the up-to-date physician, who generally prefers to take his patient into his condence than to keep him in ignorance. Deception is not practiced by the true physician. Therein lies the special difference between the quack and the honest medical man'' (Jour. A. M. A., May 27, 1916, p. 1696).

Obituary.

Robert A. Hilton.—Dr. R. A. Hilton, of El Dorado, died June 23, 1916. He is survived by his wife, his parents, five brothers and two sisters.

Dr. Heber Jones.—Dr. Heber Jones, of Memphis, age 67, died June 26, 1916. He was born in Phillips County, Ark., September 11, 1848. When a boy his family moved into what is now Cleburne County. Heber Springs is said to have been named for him.

County Societies.

MONROE COUNTY.

(Reported by P. E. Thomas, Jr., Secretary.)

The Monroe County Medical Society met in regular session at Clarendon, June 13, 1916. Members present: A. H. Gilbrech, N. E Murphy, P. E. Thomas, Sr., P. E. Terry, P. E. Johnson, P. E. Thomas, Jr. A paper was presented and numbers of cases were reported by P. E. Johnson. T. J. Stout and F. T. Murphy were appointed to read papers at the July meeting, which will be held in Brinkley.

SEBASTIAN COUNTY.

(Reported by W. G. Eberle, Secretary.)

Sebastian County Medical Society will entertain the Medical Association of the Southwest in Fort Smith next October, and are already planning for the event which promises to be a big one. Dr. St. Cloud Cooper, of Fort Smith, is chairman of the Arrangements Committee, and will be in charge of the meeting. About five hundred members are expected to attend. . The headquarters will be at the Hotel Goldman. At the regular meeting of the Sebastian County Society June 13, 1916, held at the Carnegie Library, C. S. Bungart was elected treasurer, to fill the vacancy created by the resignation of J. M. Wallace, who has moved to Marshall, Ark. A. F. Hoge read a paper on Diabetes and gave a series of case reports. H. Moulton discussed the eye findings in Diabetes.

ASHLEY COUNTY.

(Reported by J. C. Simpson, Secretary.)

Following a supper of barbecued lamb, at which were several of the doctors' wives and friends were present, the meeting of the Ashley County Medical Society was called to order by the president, W. H. Shipman, of Montrose. Minutes were read and approved. Report of transfer of E. H. Wilkes to the Pulaski County Medical Society. The application of E. C. McGehee, of Boydelle, for membership in this society was made by W. H. Shipman. The following papers were read: ''Arthritis Deformans,'' by W. S. Norman, of Hamburg; discussed by Cockerham, Shipman and McGehee. ''Hygiene of Pregnancy,'' by E. D. Erwin, of White; discussed by Norman, Barnes, Shipman and Cockerman. ''Blood Pressure,'' by J. C. Simpson, of Hamburg; discussed by Cockerman and Shipman. After reports of several interesting clinical cases by different doctors, the meeting adjourned to meet again September 6.

SEVIER COUNTY.

(Reported by A. J. Clingan.)

The Sevier County Medical Society met June 27, 1916, in Dr. Isbell's office, Horatio. Members present were: Archer, Hopkins and Kitchens, DeQueen; M. L. Norwood and Clingan, Lockesberg; Isbell and Dickinson, Horatio; Frank Norwood, Lockesburg, visitor. Our secretary, Dr. Wisdom, having moved from the county, Dr. C. A. Archer was elected secretary pro tem, after which Dr. A. J. Clingan was elected secretary to fill the unexpired term of Dr. Wisdom.

Dr. Norwood read a very interesting paper on ''Hemorrhoids,'' with the report of eleven cases he had operated on with good results. The paper was discussed by the different members of the society. There being no one else present who was on the program, talks were made on how to create renewed interest in our society. It was moved and seconded that all members of the Sevier County Medical Society with their wives bring dinner and have a doctor's picnic at Norwoodville Spring, on July 11, 1916.

Book Reviews.

A Hand Book of Infant Feeding.—By Lawrence T. Royster, M. D., Attending Physician Bonny Home for Girls and Foundling Ward of the Norfolk Society for the Prevention of Cruelty of Children; Physician-in-charge of King's Daughters' Visiting Nurse Clinic for Sick Babies. Illustrated. Published by C. V. Mosby Company, St. Louis, Mo., 1916. Price, $1.25.

In a compact and succinct form we find in this little volume only the essentials of infant feeding.

Nervous and Mental Diseases.—Edited by Hugh T. Patrick, M. D., and Peter Bassoe, M. D. The Practical Medicine Series, comprising of ten volumes on the year's progress in medicine and surgery. Published by the Year Book Publishers, Chicago. Price of this volume, $1.35. Price of the series of ten volumes, $10.00.

This series is published primarily for the general practioner; at the same time the arrangement in several volumes enables those interested in special subjects to buy only the parts they desire.

Bandaging.—By A. D. Whiting, M. D., Instructor in Surgery at the University of Pennsylvania. 12mo of 151 pages, with 117 original illustrations. Philadelphia: W. B. Saunders Company, 1915. Cloth, $1.25 net.

The author of this volume says that this book is practically a repetition of his instructions in bandaging at the University of Pennsylvania. Many illustrations are given to amplify the instructions in the text.

Post-Mortem Examinations. — By William S. Wadsworth, M. D., Coroner's Physician of Philadelphia. Octavo volume of 598 pages, with 304 original illustrations. Philadelphia: W. B. Saunders Company, 1915. Cloth, $6.00 net; half Morocco, $7.50 net.

This splendid book has brought together the results of observation, thinking and reading, associated with the study of more than four thousand postmortems.

Throughout the work the anthor has tried to encourage by varied comment, by definitions and by description, the broadest possible view of the human body, with all its marvelous complexity and, so far as possible, point out the right methods of taking the greatest of all mechanism apart.

Skin and Venereal Diseases.—The Practical Medicine Series, edited by Oliver S. Ormsby, M. D. with the collaboration of James Herbert Mitchell, M. D., and Miscelaneous Topics, edited by Harold N. Moyer, M. D. Published by the Year Book Publishers, Chicago. Price, $1.35.

This volume is one of a series of ten issued at about monthly intervals, covering the entire field of medicine. It gives a brief review of the literatnre of skin diseases in a very interesting and instructive manner. A review of methods employed by competent observers is given in the treatment of syphilis.

Diagnostic Methods.—A guide for history taking, making of routine physical examinations and the usual laboratory tests necessary for students in clinical pathology, hospital internes and practicing physicians. By Herbert Thomas Brooks, A. B., M. D., Professor of Pathology, University of Tennessee, College of Medicine, Memphis, Tenn. Third edition, revised and rewritten. Published by C. V. Mosby Company, St. Louis, Mo., 1916. Price, $1.00.

Every chapter in this little book shows that an effort has been made to make everything clear, well defined and to the point. It should prove to be very useful to the physician who is attempting to do his own laboratory work.

A Practical Treatise on Infant Feeding and Allied Topics.—By Harry Lowenberg, A. M., M. D., Assistant Professor of Pediatrics, Medico-Chirurgical College, Philadelphia, etc. Illustrated, with sixty-four text engravings and thirty original full-page plates, eleven of which are in colors. Published by F. A. Davis Company, Philadelphia. Price, $3.00.

The contents of this volume present largely the clinical and practical personal experience of the author. A serious attempt has been made to emphasize the importance of breast feeding and the digestive problems which present themselves in this class of patients. The article upon "Surgical Treatment of Infantile Pyloric Obstruction" was written by Dr. John B. Deaver.

A Text-Book of Fractures and Dislocations, With Special Reference to Their Pathology, Diagnosis and Treatment.—By Kellogg Speed, S. B., M. D., F. A. C. S., Associate in Surgery, Northwetsern University Medical School; Associate Surgeon, Mercy Hospital; Attending Surgeon, Cook County and Provident Hospitals, Chicago, Ill. Octavo, 888 pages, with 656 engravings. Cloth, $6.00 net. Lea & Febiger, publishers, Philadelphia and New York, 1916.

Every form of fracture and dislocation is dealt with most fully in this work, which, because of its completeness and its accurate illustrations, is destined to fill a place of accepted authority in the literature. Unique and important features of the work are the anthor's method in discussing fractures and dislocations, which are considered together under their several anatomical divisions, and the special reference and emphasis which are given by the anthor to pathology, diagnosis and treatment.

American Illustrated Medical Dictionary (Dorland).—A new and complete dictionary of terms used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry, Veterinary Science, Nursing, Biology, and kindred branches; with new and elaborate tables. Eighth revised edition. Edited by W. A. Newman Dorland, M. D. Large octavo of 1135 pages, with 331 illustrations, 119 colors. Containing over 1,500 more terms than the previous edition. Philadelphia and London: W. B. Saunders Company, 1915. Flexible leather, $4.50 net; thumb index, $5.00.

In this dictionary special attention is given to the wording of definitions, making them clear, concise and yet sufficiently complete. In addition, the book includes anatomic and clinical tables of tests, stains and staining methods, methods of treatment, etc. This volume has been carefully revised. Several new terms have been defined and the text matter has been increased by thirty pages.

Elementary Bacteriology and Protozoölogy.—For the use of Nurses. By Herbert Fox, M. D., Director of the William Pepper Laboratory of Clinical Medicine in the University of Pennsylvania. Second edition, revised and enlarged. 12mo, 251 pages, with 68 engravings and 5 colored plates. Cloth, $1.75 net. Lea & Febiger, Philadelphia and New York, 1916.

Without being technical this book gives a good idea of the nature of micro-organisms, and then discusses with more emphasis the ways in which bacteria pass from one individual to another, how they enter the body and act when once within, and their manner of exit. Such general information concerning the character of the disease process has been included as seemed necessary to clarify the nature of microbe action. In other words, the author has endeavored to show in the simplest manner how bacteria produce disease.

Pulmonary Tuberculosis.—By Maurice Fishberg, M. D., Clinical Professor of Tuberculosis, University and Bellevue Hospital Medical College; Attending Physician, Montefiore Home and Hospital for Chronic Diseases, New York. Octavo, 639 pages, with 91 engravings and 18 plates. Cloth, $5.00 net. Lea & Febiger, publishers, Philadelphia and New York, 1916.

The treatment of pulmonary tuberculosis presented in this book is based on the author's experience with patients in New York City. Some of them are inmates of institutions, but even these had to be cared for before admission and after their discharge. Emphasis is laid on the fact that in most cases the patient can be given the benefit of rest, fresh air and proper food in his home as well as in a sanitarium. The immense utility of sanitarium treatment is emphasized, but its limitations are carefully enumerated. Medical treatment has not been neglected because it is in many cases of more value than some have been inclined to think. The most recent method of treatment, artificial pneumothorax, has been given in detail because of its efficiency in cases where everything else has failed. Dr. Fishberg has carefully studied the literature and has presented the facts as established by leading modern observers and investigators, co-ordinating, elucidating and supplementing the knowledge thus assembled with the results of his own specialized private and hospital practice. The result is a work which makes clear the problems encountered in the treatment of pulmonary tuberculosis and supplies the student with the basic knowledge essential to the successful handling of this disease.

POLIOMYELITIS—INFANTILE PARALYSIS.

Reports from New York indicate that that city is making desperate efforts to check a beginning epidemic of anterior poliomyelitis, probably the most severe in its onset of any that has threatened American communities. In the summer and fall of 1913 several groups of cases of this disease appeared in California. The field investigations were carried on by Sawyer, who determined once more that this diseases is transmitted by contact. It was impossible to show any connection between the stable fly—formerly incriminated—and the cases which he observed. In practically every instance infection could be explained on the theory that epidemic poliomyelitis is transmitted through contact from acute cases or carriers. He showed also that the active virus may leave the body from the rectum as well as from the nose and mouth. Precautions should be taken, therefore, in the care of poliomyelitis patients to prevent infection, not only from the nasal and buccal discharges, but also from the feces and soiled bedding. Recently Flexner summarized his views as to the etiology of this condition. The microbic agent, he states, is present in the nasal and buccal secretions, carried by persons, not insects, and communicated by them in such a manner as to gain access to the upper respiratory mucous membranes of other persons. Those who are susceptible to the injurious action of the virus acquire the infection and develop the disease. Not all of them develop the paralytic or meningitic type. Some represent abortive and ambulatory types. All, however, become potential agents for the dissemination of the virus, as do also healthy persons who have been in intimate contact with those who are ill and

others who have recovered from acute attacks of the disease. The prevention of such dissemination is the actual prevention of the disease. The treatment of the condition is at best unsatisfactory, and the restoration of function to paralyzed limbs is a difficult task. A review of the subject appears in The Journal of the American Medical Association for July 8, 1916, p. 118. To repeat, prevention of this dangerous and crippling disease should be the primary object.—Jour. A. M. A.

JOIN YOUR MEDICAL SOCIETY.

It is not easy for those active in the work of medical societies to understand the attitude of those who persistently decline to join them. Medical societies are almost the only bumpers between physicians and medical sectarians who are always active, in season and out, in promulgating their theories and practices. Prysicians who take no part in the work of the medical societies reap constant benefit from the labor of those who are active, and thus may literally be considered parasites upon the organized medical body. On the other hand, some of those who belong to the societies do not appreciate the value of team work, and are not always willing to participate actively or even to pay adequately for the benefits of membership. Yet the active workers are ever on the alert for the benefit of all doctors and of medicine as a science.

Doctors are often charged with belonging to a trust. Perhaps no large vocational group less deserves this charge. Few large cities can claim society membership of more than one-half the total number of registered physicians, while within the societies there are so many men, with so many opinions, discussion is so general, and the right of free speech is so universally practiced, that in the end almost any proposition savoring of the nature of a trust or trades unionism automatically defeats itself. Medicine continues to be on trial. Perhaps never in its history has it been more beset and subjected to tribulations. Physicians must participate in its activities not only as individuals but through its organizations, otherwise the increasing host of those contending against it as a science will still further limit its usefulness.

The moral of the above is , 'join your local society.'' To suggest such a moral reminds one of the preacher who scolds his congregation because attendance is limited. The only ones who hear this tirade are those actually in attendance, who feel they are being unjustly scolded. Those whom he desires to reach are not present to hear. In this case, those who read this article are almost certain to be members of one or another of the local societies. Therefore, the moral might well be modified to ''join your local society, or, if you already belong, *participate.*'' Increase your activities; encourage the officials; and do not forget that a word spoken at the right moment may bring one of your friends into the fold. That cheery word should always be ready.—Northwest Medicine.

The Commissioner of Internal Revenue has ruled that where a physician, dentist or veterinarian prescribes any of the drugs enumerated in the Harrison Act ''in a quantity more than is apparently necessary to meet the immediate needs of a patient in the ordinary case, or where it is for the treatment of an addict or habitue to effect a cure, or for a patient suffering from an incurable or chronic disease, such physician, dentist, or veterinary surgeon should indicate on the prescription the purpose for which the unusual quantity of a drug so prescribed is to be used.''

Owing to the conflicting court opinion on this point, it would seem advisable for the physician to follow this ruling of the department if he desires to avoid trouble with the government.

THERAPEUTIC NOTES.

Bed Sores.—Dr. A. Robin recommends the use of the following ointment after the parts have been washed with Labarraque's solution:

Precipitated sulphur.
Camphor.
Pure glycerin, aa 30 grams.
—Journal de Medecine te de Chirurgie.

Chronic Cystitis.—Dr. Sinha says that santonin acts very promptly in chronic catarrh of the bladder, when given in ½-grain doses three times a day. The sensitiveness and feeling of fulness in the bladder disappear in a very short time.—Indian Mdical Record.

Neuralgia, Rheumatism, Etc.—
Tr. iodi, f℥j.
Gum camphor, ℥j.
Chloroform q. s. ad., f℥v.
M. Sig.: Apply as directed.
M. Sig.: Apply as directed.—C. Zieman in Journal of Medical Society of New Jersey.

The Secretary of the County Society will please notify The Journal immediately of any error or change in these offices.

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THE JOURNAL OF THE Arkansas Medical Society

Owned and Published Monthly by the Arkansas Medical Society

VOLUME XIII
No. 3

LITTLE ROCK, AUGUST, 1916

Yearly Subscription $1.00
Single Copy 25c

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THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIII. LITTLE ROCK, ARK., JULY, 1916 No. 3

Original Articles.

ARTERIOSCLEROSIS.*

By Frank B. Young, M. D., Little Rock.

The word "Arterioselerosis" as at present understood, means a rather indefinite syndrome involving the vascular system and the kidneys. Recently, writers have begun to include the venous as well as the arterial system in this process, the heart, kidneys, veins and arteries being the organs primarily involved. This description covers more than was originally involved in the definition of arteriosclerosis. The old conception of chronic interstitial nephritis probably covers that now understood as arteriosclerosis in a fairly satisfactory manner.

The cause of this trouble, more than any other factor, will be found in the inereasing high pressure of living. We are eating a higher proteid diet and living under heavier strain than has ever been the ease heretofore. The mental strain under which the average professional and business man lives is greater than it has ever been in the history of the human race, and there is no question but this is the prime factor in the increase of this trouble. In my consideration of this subject, I am not taking into account the prevalenee of syphilis, as I look upon a syphilitie endarteritis as an entirely different pathologic proeess from a true arteriosclerosis. It is generally conceded by present day writers that alcohol in its various forms plays rather a minor part in the production of this trouble; although it is possible that in some cases it is the deciding factor in a breakdown. I well remember two cases, neither of whom at any time in their lives had ever used alcohol at all, in any form, but both of whom developed well marked symptoms, one dying of apoplexy, the other still living, but in much impaired health. These cases both, undoubtedly, developed their trouble from a strenuous life and too much meat diet.

The symptoms of arteriosclerosis usually develop in the fourth decade of life, beginning insidiously with some symptoms of fatigue or overexertion, a dislike for continued effort and general irritability. The beginning is so very slow that quite often the condition is well advanced before a diagnosis is made; in fact, it is not uncommon for the diagnosis to be made by the life insuranee examiner, he finding a blood pressure of 180 or more. In these eases the urinary examination frequently discloses urine of a low specific gravity, but containing neither albumen nor casts. This is a primary or beginning stage of this trouble, and if the living conditions are not eorrected, it will go into the second stage or that in which the heart lesions develop with renal complications. In this stage, the disease is definitely curable, not by medicine, but by an entire change of the patient's living conditions.

The third stage comes on by a gradual increase of the heart and renal lesions, often aecompanied with anginal paroxysms. These are caused by involvement of the coronary arteries in the hardening process. This stage is not curable, and is only to be relieved by careful medication and careful living.

The prognosis in all cases after the disease is definitely established is grave, as it is an impossibility to determine what arteries are involved: should those of the heart, body or of the brain become involved, the prognosis would be definitely worse than when only the peripheral arteries are involved. We all know of cases where the patient had a calcareous degeneration of the arteries of the arm without much visceral involvement. These cases frequently live to an extreme old age without manifesting either physical or mental symptoms. However, we are also acquainted

*Read before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2, 3, 4, 1916.

with cases where there is but little peripheral involvement, but the brain or heart, or the large arteries of the viscera become involved with serious complications.

The diagnosis is to be based upon the finding of an increased blood pressure, the urinary findings and the presence of more or less heart involvement.

The treatment is to be based largely upon a complete change in the method of living. In the beginning of the trouble it will not be necessary for one to give up active life, but simply to reorganize on a different basis, cutting out all alcohol, correcting the diet and stopping, or at least, reducing mental strain. In this stage it will hardly be necessary to give any medicine. In the later stages, iodides in some form will be of decided benefit. Nitrites in some form are often valuable to relieve paroxysms. The various heart tonics, digitalis, strychnine, caffein, etc., are valuable in restoring a broken compensation; however, all these remedies should be exhibited very guardedly and only when definitely indicated. Guarded physical exercise should be used, but care must be taken not to overstrain the heart, and set up a dilatation in place of the compensatory hypertrophy.

The causes of death in this trouble are ordinarily a uremic coma, angina pectoris, a chronic valvular heart lesion with dropsy or apoplexy. Often by watching the course of the disease, the development of anyone of these troubles may be forestalled.

In conclusion, I would urge upon all a more careful consideration of the development of this trouble and the more constant use of a blood-pressure apparatus in the routine examination of our patients. In this manner many a man in the height of his usefulness can be carried through a long, active business career, which otherwise would be terminated by one of the accidents that come up in an unwatched and unguarded condition of this kind.

DISCUSSION.

Dr. G. H. Moody (San Antonio, Tex.): I hardly know why I was asked to open this discussion, because it is not a disease that figures very prominently in nervous troubles, although there are quite a number of these cases that develop mental trouble a little later on, as we all know, of course. I agree with Dr. Young very decidedly. I don't see where his paper could be improved on. I think he is correct in stating that alcohol does not cause as much arteriosclerosis as some of us have long thought it did, although it does play an important part; and I believe it is pretty well accepted that there is no reason why any of us should prescribe alcohol. I think the greatest cause of arteriosclerosis is overeating and imprudence in eating. I don't believe overwork causes it anything like as much as overeating and lack of sufficient exercise and elimination.

I believe that a man suffering from arteriosclerosis can go ahead and do a reasonable amount of mental work, provided he lives right. I think Dr. Young is entirely correct in saying we generally overtreat these cases, that we give them too much medicine. The fact is, I don't believe very much medicine is indicated, and, unless there is a definite indication for it, I don't believe we ought to give it. I think the main question is that of diet and exercise and living outdoors as much as possible. I think they should have as much as possible of a free protein diet, a diet that gives plenty of bulk, but still as little of protein as possible. We can very simply do that by being practical in these cases, and thorough, of course, or we are liable to fall down. We can tell our patients to avoid eating any of the albuminoids. And, unless they are patients who are able to come to our office every day or two and follow our instructions carefully, they don't know what we mean by this. So, my plan has been to mention to them certain diets they should not eat. For instance, beef, beans, peas and a few things definite. Say a few things definite to them, and they will get some benefit. If we try to give them a long list and have them to follow it, they soon quit. They soon get to thinking, "What's the use?" and they leave off and practically do nothing. I think the important thing in these cases is to give them a few definite instructions that are of the greatest value, and have them follow them and we will get more benefit.

As the doctor said, I don't know many medicines that will do the ordinary cases a great amount of good. Of course, in the attacks, as the doctor has said, there are a great many things that can be done.

It is a little hard sometimes, we know, in later life to differentiate between senile conditions strictly and arteriosclerosis conditions. They so frequently go together, until frequently it is not necessary to differentiate them, because they are in unison in causation.

But I haven't seen fit to advise these men to quit work. If a man is made to quit work, he generally worries more than if he does a certain amount of work. I believe it is better, as the doctor says, for him to systematize his life and learn how to readjust it to his arteriosclerosis condition, and live within the bounds of that which is necessary in those cases, and I believe he will be better off than if he tries to quit work altogether.

Another thing, in dieting him we must be careful not to starve the patients, because these patients, just as well as any others, need nutrition to be kept up pretty fully or normally.

Dr. C. M. Lutterloh (Jonesboro): I very much appreciated this paper. Especially I think the point in the treatment of people who are suffering with arteriosclerosis in the beginning is for the doctor to sit down and talk to the man and tell him wherein he thinks he is going to have a short life, make a careful blood pressure test, and tell him he wants to go slow, that he is living too fast and eating too much. I found, by sitting down and reasoning with those people, that you get their hearty co-operation, and the patient appreciates it himself, and is very grateful to you.

Dr. E. H. Martin (Hot Springs): We were taught that arteriosclerosis was practically the same as calcareous degeneration of the arteries. Now, I find the subject is correctly presented by Dr. Young. We find only a part of an interstitial nephritis. Then, the question arises, if interstitial nephritis and arteriosclerosis are only different parts of one symptom complex, what is the cause of the high blood pressure? It certainly cannot be in the old man with bony arteries, that the arteries are too hard to expand. It cannot be that the kidneys are so dense, right in the beginning, that they are harder to pump through,

and the blood has to be pumped harder. It must be something else.

I have a theory which I have never been able to prove, that high blood pressure in these cases is due to an irritation of the suprarenal glands along with the kidneys; that the constant absorbing of a small dose of adrenalin every minute in the day keeps the blood pressure up, and that, if we could in some way relieve the suprarenal capsules of their congestion, we would do away with that one symptom, and possibly do more good to the patient in the long run by relieving the overwork of the heart. I hope that some surgeon—I am not a surgeon—will some day have the nerve to take a man, who is just beginning to show a high blood pressure and has interstitial nephritis, and do the old capsular operation, that has been done many times in parenchymatous nephritis. I do not think this has ever been done in these cases; but these cases are the ones in which possibly it might have more effect than any of the others.

Dr. J. T. Clegg (Siloam Springs): Several years ago I observed a great many cases of arteriosclerosis in the old soldiers who applied for pensions. The gentleman remarks in his paper that it is not caused from alcohol, it is not caused from syphilis, and it is not caused from tobacco, and my observation is that it is not caused from overeating. My conclusion is that arteriosclerosis is a specific infection. It is a disease of itself. It is a disease due to some micro-organism that is not yet discovered, and I think in time that proper investigation will determine this to be a fact.

Dr. R. C. Dorr (Batesville): I think that arteriosclerosis is a misnomer. As regards high blood pressure, that is compensatory. It is essential to the well-being of the individual. That is nature's way of carrying on the circulation, supplying the organs with the necesasry amount of blood. It is a physiological law for an organ to perform its functions; it must have blood, in proper quantity, quality and temperature. If the blood vessels are hard, it takes more force to get that blood through, so that these people must have increased blood pressure. Then, when the pressure goes clear down—you let a blood pressure of 200 fall 25 tomorrow and keep on down to 100 and below, going that way, that patient will die in a week. It is essential for their welfare to have an increased blood pressure.

Regarding the symptoms of arteriosclerosis so-called, that just simply depends on what set of vessels are involved. It all grows out of toxemias. Just what it is, I don't know. You have a case that doesn't need medicine but once a week. Give him four tablespoonfuls of castor oil once a week; cut down the albumen food; give him fresh air and rest; let him do his ordinary work, and some of those people will go on for twenty or twenty-five years and do some of their best work after that. It is all some form of toxemia. You have obstructed bowels for forty-eight hours or three days. You relieve it. The bowels look all right, but your patient dies in twenty-four hours. Why? Because there is some toxemia that has been locked up in that bowel and overwhelmed that patient and killed him, but we don't know what it is, I am sorry to say. Whether we ever will know, I cannot say.

Dr. E. D. Holland (Hot Springs): High blood pressure and arteriosclerosis are not necessarily the same thing. A man may have a high blood pressure and not have arteriosclerosis.

High blood pressure is necessary in arteriosclerosis to overcome the increased resistance of the arteries to the flow of blood; without a high blood pressure, in such a condition, we would not have proper circulation.

A man who is physically active, for instance, an athlete, may have a blood pressure of 150 or 155, and be perfectly normal; while the same man, with the same build, under different conditions, say, a clerk in a store, may have a blood pressure of only 120 and still be perfectly normal.

A heavyweight prize fighter should have a blood pressure between 158 and 163 when he goes into the ring. Such a man is in the best possible condition, but he has an unusual amount of work to do, and his blood pressure has to be high to do it. Such a case is not a pathological condition.

If you get provoked, or frightened, your blood pressure goes up. If it didn't go up you would not be stronger. The only reason that we are stronger when we are provoked, or frightened, is because we have a high blood pressure under such conditions.

To overcome high blood pressure it is often not necessary to treat the arteries at all, and to overcome some high blood pressures would be the worst thing we could do.

Dr. Young (closing the discussion): I wish to thank you for the very free discussion. I think Dr. Moody and I agreed all the way through. I did not bring up the problem of the mental conditions that are associated with arteriosclerosis, because they ordinarily do not come under the consideration of the general practitioner. I have had a good deal of experience in that, and I might mention a few cases definitely.

We had one case with a blood pressure of 180, or something like that, that was classified as arteriosclerosis; an organic brain disease; and there was a good deal of discussion in the staff meeting as to whether he should be classified, his peripheral arteries not being calcareous, not being hardened, or any specific indications in his peripheral circulation. The man went along, and, after some three or four months, died. We held a post-mortem on him, and found the entire circle of Willis thoroughly calcareous. If it had been in the radial arteries, I would have called it calcareous degeneration rather than a true arteriosclerosis. So, I stayed away from that part of the discussion, and I really expected Moody to bring it out. There are many things in the pathology and condition of cerebral arteriosclerosis that I hoped he would go into and bring out. Ordinarily one with cerebral arteriosclerosis is likely to be depressed; but a diagnosis of those conditions is to be based on the blood pressure, and on your other corroborating symptoms.

As to the cause, I believe that hard work and overeating are the prime factors, and especially a high proteid diet. A high meat or albuminous diet is a factor.

Dr. Lutterloh struck the keynote of my paper when he said, "Get right with your patient." He didn't phrase it that way, but he meant that you should get right with your patient. In other words, a patient comes to you, and you make a diagnosis which may mean that his life will be terminated within six months or within twenty years, depending on whether he lives right or doesn't live right.

Now, I had one patient under my observation for twenty-four years. He was not active the last few years of his life, but for twenty-four years he carried a little albumen. We didn't know it was high blood pressure then. They hadn't got to putting out the blood pressure apparatus at that time, but looking back I can see. He went right along with a whole lot of work for twenty-four years, but for the last three, four or five years he was not active. That shows what can be done by getting right with your patient. Dr. Lutterloh struck the keynote of the whole condition.

And, what I am trying to impress on this meeting is the fact that it is not the matter of taking medicine; it is not a matter of getting cured; it is a matter of instructing your patient to live right, and to go along with a more or less modified life. You have got to modify his life. He cannot go on in an active, high-pressure life. He has got to modify it to a certain extent if he continues to live, and really if he continues to do the best that's in him. You should sit down with your patient and talk to him, as Dr. Lutterloh suggested, and advise with him. Be his friend as well as his doctor; and be his intelligent friend, because a man with an arteriosclerosis condition needs a guide. He doesn't need medicine; it is mighty little medicine you need to give. I am not a therapeutic nihilist. I do not believe in giving and giving medicine, but I do believe in giving medicine intelligently. And I think what Dr. Lutterloh said is the most important part of this discussion.

I am not going to attempt to go into what Dr. Martin said about the differential diagnosis between chronic interstitial nephritis and arteriosclerosis, because I don't know. I have heard the matter of adrenal condition being suggested as the cause of the trouble. I hope the doctor is right, because if the doctor is right, it is a very simple operation to remove one of the adrenals, or to resect a part of them, and that suggestion is well worthy of being followed up.

Dr. Clegg and I have discussed the matter that he brought up at times before, and I rather believe Dr. Clegg is right. I think the whole thing is going to come down, in the due course of time, to this being a specific infection. I really believe that the doctor may be on the right track there, and he can hope as well as wish.

Dr. Dorr brings up the proposition of the intestinal toxemias, and he brought out one other point. There is no question but what intestinal toxemia is the same thing we have been talking about. You take a high albuminous diet, and in the intestinal tract you get invariably a certain amount of fermentation or putrefaction, which would not be the case with a vegetable diet. It bears out his suggestion.

Dr. Dorr brought out another point that I neglected to mention in my paper, and that is the point that a high blood pressure is often compensatory. It is very necessary that many a man carry a high blood pressure. Now, when the blood pressure begins to fall—say, you go to see a case today, and his blood presure is 210 or thereabouts, and you go back tomorrow and it is 180, and you go back day after tomorrow and it is 140; that man is going to die within forty-eight hours. That is the first symptom of death that comes to this class of patients, and it will come without very many other manifestations. A high blood pressure is a necessary part of a man's living affairs in many cases.

THE UNITED STATES PUBLIC HEALTH SERVICE ASKS, DO YOU

Clean your teeth and then expectorate in the washbowl?

Omit lunch to reduce weight and then overeat at dinner?

Go to the country for health and then sleep with your windows shut tight?

Wonder why you have earache and then blow your nose with your mouth shut?

COMMON FALLACIES IN THE TECHNICAL DIAGNOSIS OF INDIGESTION.*

By Estill D. Holland, M. D., Hot Springs.

Anyone who stops to think will admit that the stomach is the athlete of the human organs, with the endurance of a bloodhound and the recuperative power of a moving picture actor.

It does not make any difference what ails the patient, his stomach has to receive the concoctions given him for his ailment and no regard is paid to its individual tastes.

Great things are sometimes expected of the stomach as can be easily shown by following some physicians' reasoning inversely.

For instance, a man is given a urethal antiseptic by mouth, this means that he has to take this antiseptic into his stomach, his intestines, his blood vessels and heart and liver, then dilute it about a thousand times as it passes through his kidneys and bladder and still have a poison strong enough to discourage the growth of a virulent infection in the uretha.

I doubt whether a copper kettle could stand such treatment.

Food faddists, diet maniaes, hydrochloric acid fiends and bartenders have added a few of the finer points to stomach torture—and I do not know which of the four is the worst—until the diagnosis of digestive troubles has become one of a physician's most important duties.

The same latitude has been taken in diagnosing "indigestion" as in causing it, and we have progressed from the stage where you looked at the patient's tongue and prescribed calomel, to the stage where we try to pick out some little segment of the digestive tract and cure it, just as if it was a separate unit and capable of independent existence.

In other words, our diagnostic ability is becoming so exact that we are apt to depend on some one test and forget the whole individual.

All the technical methods of digestive diagnosis should be used in the same way that the Wassermann test is intelligently used; that is, whenever your technical test agrees with your provisional diagnosis, in other words works out as you think it should; take its

*Read before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2, 3, 4, 1916.

word for it, but whenever your technical test does not agree with your provisional diagnosis, either ignore it or take tests to confirm it.

I will cite two cases as an example:

Mr. A., age 60, came to me for stomach trouble; he had been examined and treated for stomach trouble by several physicians, one of whom had made a gastric analysis and reported an anacidity of the stomach contents. Mr. A. was thin, weak, having gastric distress and taking hydrochloric acid and pepsin. He complained of every classical symptom of gastric hyperacidity, and on taking his test breakfast I found that he had a total acidity of 82. and a free hydrochloric acid of 57. This cleared up the diagnosis and made the patient "go with his symptoms."

Patient was very much afraid to take the stomach tube, and when I removed the test breakfast in less than a minute he was greatly surprised and elated.

Trying to account for the variance in his gastric analyses, from no acid to twice too much, in a comparatively short time, I questioned him and found that the previous physician had had trouble in passing the tube and had taken some time to get the contents; patient said half an hour, so we can allow five mintues, as time apparently flies for patients during this operation.

This meant that the tube was partly down the throat for a few minutes, the patient could not close his mouth, the secretion of saliva was increased, the saliva is alkaline and he had swallowed enough to netralize his gastric contents. His physician had done the right thing in a mechanical way, had lost sight of everything but the man's stomach, and had then taken his findings for true with an absolute disregard for every other symptom the patient showed.

I changed everything this patient was doing, gave him an antacid to take one hour after meals and at bedtime, gave him a hyperacidity diet, and lots of it, and in three weeks he was ready to go home in good condition.

If Mr. A.'s home physician had never tried a test breakfast he would have no doubt had him on the correct treatment from the first.

Mr. B., age 34; patient was a friend of mine, but I have never treated him. He came to the office one day frightened half to death; said that he had a gastric ulcer and the surgeon had said he should be operated on the next day. I asked him his symptoms, and they didn't sound like gastric ulcer. I then asked him how they had examined him to make the diagnosis, and he said: "They took an *x-ray* of me after a bismuth meal." To make a long story short he had complained about his stomach, and this surgeon, who was a friend of his, told him he would take an *x*-ray picture and see what was the matter. The *x*-ray likely showed a dilatation of the stomach and a heavy shadow in the neighborhod of the pyloris, and *without any other examination* Mr. B. was told that he had an ulcer and advised to submit to an operation.

I made a gastric analysis the next morning, and one every other day for about two weeks, and I never found a trace of any acid in his stomach contents, no blood in the contents or stool; a typical case of anacidity with a partial stenosis of the pyloric end of the stomach.

I put this patient on hydrochloric acid, pepsin, some organotherapy and a diet, and he has gained over ten pounds in the last year and feels fine.

The only thing that I was at all worried about was a cancer, but though I examined him every few weeks for months, I have never found any real reason to think he has one.

This patient gave a history of stomach trouble of years standing, and I do not think that there was anything active about his condition.

The surgeon evidently had a medical education and an *x*-ray confused. I can see no other reason for his diagnosis. He forgot that the *x*-ray should "agree with his patient" and was going to make his patient "agree" with the *x*-ray.

An *x*-ray, always made under the same conditions and by the same man, is capable of confirming a great many digestive diagnoses, but it was never intended to make one alone, except in very exceptional cases, nor to make one that was absolutely incompatible with a patient's other symptoms.

Because you do not find tubercular bacilli in his sputum on your first or tenth examination, is no reason to say that your patient hasn't tuberculosis; so why depend on one gastric analysis?

Because a Wassermann come in positive once does not mean anything unless the patient "agrees with the result;" he may have eaten a big meal just before you took his blood; so why depend on one or two *x*-rays? The patient may have some old scars or depressions from previous ulcers, or a thousand other things, that might cause one or more *x*-rays to show abnormal.

I approve of every known method for the exaet diagnosis of digestive troubles, and use a good many of them eonstantly; but if I had to get along either without any laboratory methods and *x*-ray, or without the physieal examination of the patient, I would prefer to do without the laboratory and *x*-ray.

Digestion is one of the most beautiful examples of the dependenee of one part of our body on another, and should represent a perfeet series of events in sequenee. All our methods of diagnosis are simply little points of evidenee, and should be treated as sueh, and we should sit in judgment to find the eause of the trouble.

Beeause we find bile in the urine is no reason that we should make a diagnosis of a hyperaeid stomaeh, although it should eall our attention to the stomaeh, and if we did find a hyperaeid stomaeh we would not be justified in treating the stomaeh alone.

The examination for indigestion means, examine the patient, take his history, examine his blood, urine, stool and stomaeh eontents, and see that the different results are eompatible with one another; if still in doubt, take an *x*-ray and make a Wassermann.

If the above is adhered to we eliminate the freak results and are able to draw definite eonelusions that we ean depend upon.

DISCUSSION.

Dr. T. M. Fly (Little Rock): I want to agree with Dr. Holland about the stomach being imposed on, I guess, by the medical men about as frequently as the appendix is by the surgical men. It seems to be the scapegoat of all the organs.

I am particularly impressed with the case that he cited as to his findings of hyperacidity in a man who had been diagnosed probably for cancer, without any acidity. I think this accident will happen very often, unless repeated examinations are made of the stomach contents. I have adopted the rule of making at least three consecutive examinations of the stomach contents before I determine as to what the real secretion is, or what the percentage of the acidity is. Also, I find that I get a great deal of light upon the stomach condition by making a systematic examination of the feces with a microscope. I think that will probably throw more light upon the condition of the intestinal tract, including the appendix, than any other thing which is now practiced in any degree.

From the reports I had from Dr. Sippey of Chicago about the stomach and its diseases, probably the *x*-ray is more of a menace in the diagnosis of stomach diseases than it is a servant of good repute.

I suppose most doctors say we should have an *x*-ray made. But, I have seen in the Mayo clinic and other places cases that I thought the *x*-ray "buffaloed" the diagnostician into seeing things that were not present.

I want to say that I enjoyed the paper of Dr. Holland, and I think that not enough attention is paid to the examination of the stomach. Just the other day a man came into my office, whom I had been treating some time for a pyloric ulcer. Maybe he didn't know it, but he gave all the symptoms of it. He had been out and passed an examination for life insurance, and said that the examiner had not discovered that he had any pain or swelling in the gastric region. I don't know but what life insurance companies will sooner or later demand these examinations, and I think if I were an insurance man I would.

Dr. L. J. Kosminsky (Texarkana): I appreciated Dr. Holland's paper, and I can appreciate the fact of an *x*-ray examination, because I happened to fall heir to a patient who had been to a famous clinic where they put these patients through all tests possible. The patient was somewhat of a nervous temperament, there having been some carcinomatous condition in the family. The patient endeavored to relate to me all that had been told him, and said, "You don't know anything about me, but I can tell you. They gave me every treatment possible. They gave me bismuth paste and everything, and this accumulation of gas I had in the intestinal tract they accounted for from the fact that they took an *x*-ray and found that I had a leak in the ileo-cecal valve." I said, "You don't need me; you need a plumber." However, I continued to treat patient.

Dr. Holland (closing the discussion): I just want to thank the gentlemen who discussed the paper. The only object in the world in the paper was simply to bring out the fact that you cannot diagnose indigestion by any one tihng. Indigestion means there is something the matter from the eyelids to your anus; there is something wrong in the whole tract. Your eyesight is not right, the saliva is not right, the stomach is not right, the duodenum is not right, the bowels do not act right; but, as far as anybody in the world saying they can cure any stomach trouble, or indigestion, which is confused with stomach trouble, by eliminating or curing one segment of the intestinal canal, is ridiculous, because one segment will not be out of condition unless the previous segments are out of condition. We all know the harmonious action of one segment stimulates the next one to secrete. You can't wash out the colon and cure indigestion, nor take out the appendix and cure indigestion, nor take out the gall bladder or bile duct or gall stones and cure gall stones. You can cure the results of gall stones, but you can't cure the thing that causes gall stones. If you have gall stones, that means ordinarily—not every time—that you have a hyperacidity of the stomach, a congestion of the mucous membrane of the duodenum, a closure of the bile duct, a damming up of the bile in the common bile duct and precipitation of bile which forms gall stones, and soembody comes along and operates on gall stones and says the patient is cured; whereas, if he hadn't dieted that patient two days before the operation and ten days after the operation, he would have died.

DIFFERENTIATION BETWEEN UPPER (CENTRAL) AND LOWER (PERIPHERAL) MOTOR NEURON INVOLVEMENT.*

By George B. Fleteher, M. D., Little Roek.

This paper, as its title would suggest, is intended to deal exelusively with motor paralysis. One may safely say that the majority of all eases of paralysis are of the motor type.

*Read before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2, 3, 4, 1916.

After superficially examining a patient, we are ofttimes in position to state definitely that there is a paralysis of one or more extremities which, however, is no more than the patient himself knew when he came to us. In other words, a simple diagnosis of "paralysis," without at least an attempt to find out whether the lesion is in the central or peripheral motor neuron, is the same as no diagnosis at all.

In order that we may understandingly discuss the different types of motor paralysis, your indulgence will be requested while we briefly review the anatomy and physiology of the motor tracts.

The corticospinal or pyramidal tracts have, as is known, their origin in the motor region of the cerebral cortex. They pass through the internal capsule, the crus cerebri, and the pons to the medulla. There a separation takes place into the lateral pyramidol tract, which passes, by way of the "decussation of the pyramids," into the opposite lateral column of the spinal cord, and the anterior pyramidal tract which descends on the same side in the anterior column.

Both categories of fibres end about the cells of the anterior horn at different levels of the spinal cord, those of the anterior pyramidal tract, however, only after they have passed through the anterior commisure of the cord and by delayed decussation have crossed to the opposite side.

Through these pyramidal tracts, now, the psychomotor impulse is transmitted from the cortical motor centers of the cerebrum to the spinal centers of the different muscles of the body, but not exclusively by this path, rather are these chief motor tracts assisted in their task by a number of accessory motor tracts, namely:

1. Rubro—spinal arises in red muscles.

2. Tecto—spinal arises in roof of mid brain or Tectum Opticum.

3. Thalamo—spinal arises optic thalamus.

4. Vestibulo—spinal arises Deiter's muscles.

These last named tracts are connected with the motor region of the cerebral cortex, so that, thanks to them, even on elimination of the pyramidal tracts, part of the psychomotor impulses can be transmitted in a roundabout way to the cells of the anterior horn, and hence to the muscles.

Now, however, the pyramidal tracts also exercise an influence upon the important mechanism of the regulation of tonus and also upon the production of the tendon reflex. They exercise an inhibition in that they take care that reflex action and degree of tonus do not go beyond a definite and useful degree. Without this inhibitory action of the pyramids, tonus and reflexes would not present such constant relations as is actually the case. If, however, the pyramids are destroyed, hypertonia and hyperreflexia take the upper hand to a degree hindering motion.

The motor tract is divided into an upper, central or cortico-spinal neuron, extending from the motor cortex in the cerebrum to the cells in the anterior horn of the cord, and into a lower, peripheral or spino-muscular neuron extending from the cells of the anterior horn to the musele and plates.

The symptoms produced by involvement of these two neurons are wholly different, the degeneration of the one does not spread into the other; in each there is a degeneration with this distinction: In the first, the upper neuron type, the degeneration does not extend downward; it is rather a degeneration which is universal or complete, affecting simultaneously the whole motor fibre below the lesion on the side remote from the nerve cell which is its trophic center. In the second, or lower neuron type, the degeneration does extend downward from the cell in the anterior horn, severing the connection of the muscles with their "trophic centers," the cells of the anterior horn.

The symptoms, by which we are able to differentiate the two types of involvement, will now be outlined, giving later the cause of each of these symptoms.

In paralysis of the upper neuron type one will find:

1. Diffuse muscle groups affected—never individual muscles.

2. Spasticity of the paralyzed muscles—hypertonicity.

3. No muscular atrophy except from disuse.

4. Electric reactions normal.

5. Deep reflexes present and usually exagerated (to clonus).

6. Plantar reflex extensor in type (Babinski's) phenomenon.

In the lower neuron type one will find:

1. Individual muscles may be affeeted.

2. Flaecidity and atonieity of the paralyzed muscle.

3. Atrophy of the paralyzed muscle.

4. Reaction of degeneration.

5. Deep reflexes diminished or absent.

6. Plantar reflex, if present, is normal flexor type (unless flexors of the toes are themselves paralyzed).

There is a definite reason for each of these symptoms.

1. In the upper type diffuse muscle groups are affeeted beeause their cortical and traet centers lie so closely together that it would be impossible to piek them out individually, whereas, in the lower type, a lesion whieh does not involve the entire anterior horn may leave some individual musele unaffeeted.

2. The spastieity and hypertonicity of upper neuron involvement are due to the fact that eortical inhibition is removed when the pyramidal tracts degenerate, the flaeeidity and antonicity of the lower type are due to the fact that the spinal reflex arc is broken when the lesion is in the anterior horn eells (and to the failure of degenerated nerve fibres to conduct impulses when there is involvement peripheral to the horn cells).

3. In the upper type there is no muscular atrophy because of the fact that the muscles remain in uninterupted connection with their trophie centers in the anterior horn cells; on the other hand atrophy results in the lower neuron type because this conneetion is severed.

4. Electric reaetions are normal in the upper type because the spino-museular neuron, which is the one concerned in eleetrieal reaetion, is still intact, eonsequently the motor nerve fibres and muscle fibres are still capable of transmitting impulses—the reflex arc is unbroken. In lesion of the lower motor neuron we find, after an interval of several days, reaetion of degeneration, which condition is tested with faradic and galvanic eurrent and shows the following charaeteristics:

(a) Nerve is excitable, neither faradically nor galvanieally.

(b) Muscle is not excitable faradically; on the other hand it may be slightly overexeitable galvanically; the twiehings, however, are more sluggish and definitely weakened; they are still retained on aeeount of the sareoplasm which still remains, but is a less excitable element, gradually disapearing as atrophy proeeeds; this latter element is subject to faradie stimulation normally.

The reason for this ehange in eleetrical excitability is that there is a destruetion or degeneration of the end branches of the peripheral motor nerves by which they lose their power of eonduetion (there being a break in eontinuity, there is no path over whieh impulses may travel).

5. Deep reflexes are exagerated in the upper type because when the pyramidal traets are involved inhibition is removed. In the lower type they are minus or absent, beeause the reflex are is interfered with or broken.

6. Babinski's reflex, *i. e.*, extensor platar reflex is found in the upper type because there is pyramidal tract involvement and is not present in the lower type beeause there is no pyramidal involvement; this phenomenon is found normally in infants up to the time when the pyramidal traets are fully developed, but an universally accepted reason has never been given for its oeurrence at any time.

Of the diseases causing paralysis of the upper motor neuron type the most eommon are:

1. Apoplexy (cerebral).

2. All forms of cerebral disease, as new growths, abcesses, trauma, etc.

Of the lower motor type:

1. Polio myelitis.

2. Progressive museular atrophy.

3. Neuritis.

4. Severing of motor nerve.

DISCUSSION.

Dr. W. A. Snodgrass (Little Rock): I think that this is a very important paper, and wish to thank Dr. Fletcher for bringing it before the society. I do not feel competent to go into all the details, because I have never given this subject any special consideration; but I do know we make a great many mistakes in making a diagnosis in connection with injuries to the nervous system, and I think it behooves all of us to take some special interest in that line of work. I thank Dr. Fletcher for bringing this up. I am sorry the gentlemen who prepared discussions on it are not present so that they could entertain us.

THE JOURNAL
OF THE
Arkansas Medical Society

Owned and controlled by the Arkansas Medical Society and published under the direction of the Council.

DR. WILLIAM R. BATHURST, Editor.

PUBLISHED MONTHLY. Price, $1.00 a Year in Advance. Single Copies, 25 Cents.

Entered as second-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under Act of Congress of March 3, 1879.

All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

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The Journal of the Arkansas Medical Society,
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Little Rock, Ark.

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Editorials.

HISTORY OF THE SOCIETY.

The plan to collate a history of the Arkansas Medical Soeiety to which a committee of three was appointed at the annual meeting in May, is most eommendable. As was set forth at the meeting, the time to do it is now. In fact, it should have been commenced earlier, before some of the bright lights of the society passed away. However, we still have some of the old-timers with us, and with their help it will be aceomplished. As one of the eommittee with Dr. Meriwether and Dr. Gibson, the editor of The Journal will do his best, but he and Dr. Meriwether must perforce rely on the fine memory of their older confrere, Dr. Gibson, an old comrade in the eouncils of the society, even, to repeat the moral of a story he told at the meeting. "He's not so damned old." Dr. Gibson is at least not old in heart or brain, but he is old in wisdom and experience; and it was truly stated at the meeting that he alone is the man who can furnish the "dope." We know he is willing to draw on the fountains of his wonderful memory, and endowed with a sense of humor also, we hope for an entertaining and eomprehensive history which must be kept up to date hereafter.

NEW COMMITTEES.

President M. L. Norwood of the Arkansas Medieal Society has appointed the following committees for the year 1916-1917, and in publishing them it is almost needless to suggest that the members give the committees their cordial support and co-operation.

Scientifie Program—R. C. Dorr, Batesville, chairman; Wm. R. Bathurst, Little Rock; C. P. Meriwether, Little Rock (ex-officio).

Medical Legislation—C. A. Archer, De Queen, chairman; F. T. Murphy, Brinkley; Wm. T. Parks, Hot Springs.

Board of Visitors to the Medieal Department of the University of Arkansas—G. A. Warren, Black Rock, chairman; W. H. Deaderick, Hot Springs; O. L. Williamson, Marianna.

Necrology—Don Smith, Hope, ehairman; Wm. Gibson, Nashville; T. T. Shackelford, Foreman.

Health and Public Instruction—C. R. Shinault, Little Rock, chairman; H. H. Rightor, Helena; M. Fink, Helena.

Sanitation and Public Hygiene—C. W. Garrison, Little Roek, chairman; S. A. Southall, Lonoke; J. S. Wood, Hot Springs.

Cancer Researeh—W. A. Snodgrass, Little Rock, ehairman; C. J. March, Fordyee; H. H. Kirby, Little Rock.

First Aid—J. P. Runyan, Little Rock, chairman; J. E. Sparks, Crossett; A. S. Buchanan, Prescott.

Infant Welfare—F. C. Mahoney, El Dorado, ehairman; H. H. Niehuss, El Dorado; Morgan Smith, Little Rock; P. H. Phillips, Ashdown; C. E. Kitehens, DeQueen.

**History of the Arkansas Medieal Society*—L. P. Gibson, Little Rock, chairman; C. P. Meriwether, Little Rock; Wm. R. Bathurst, Little Rock.

†*Memorial Tablet in Memory of the Late Dr. John S. Shibley.*—L. P. Gibson, Little Rock, chairman; J. G. Eberle, Fort Smith; A. R. Hardin, Fort Smith; F. Vinsonhaler, Little Rock; M. D. Ogden, Little Roek.

Medieal Expert Testimony—L. P. Gibson, Little Rock, chairman; M. D. Ogden, Little Rock; St. Cloud Cooper, Fort Smith; C. H. Cargile, Bentonville; L. J. Kosminsky, Texarkana.

*Named in resolution.
†Continued by motion.

SAVE THE BABES.

The Texarkana meeting of the Arkansas Medical Society really did things worth while. One of the very best was the appointment of a Committee on Infant Welfare. It is only of comparatively recent years that the importance of this question has been fully understood and acted upon. The fearful mortality among infants and children under the age of five years has long been a blot on the profession. Improper feeding, impure milk, dirty milk bottles, unsanitary conditions, unscreened windows and doors, badly ventilated rooms, careless mothering by ignorant women, careless nursing, exposure, and the criminal carelessness or ignorance which takes children to public gatherings or in street cars, or allows them to mingle with other children while suffering from contagious diseases, are only some of the factors in this needless sacrifice of infant life.

Of recent years baby clinics, lectures to mothers, baby shows from a physical perfection standpoint, milk inspections, visits of instruction to mothers, war on flies and mosquitoes, together with other measures, have resulted in a marked decrease in infant mortality, a decrease so remarkable that it can only be attributed to the efforts put forth with that end in view. The appointment of this committee is another evidence that our society is trying to keep in the van of progress and is doing more than perfunctorily attending meetings and listening to the reading of papers. The society that *does* things is worth a dozen that only *talk* things.

MEDICAL "EXPERT" TESTIMONY.

The Arkansas Medical Society took a great forward step in appointing at the recent annual meeting a committee to confer with a committee of the State Bar Association for the purpose of framing, and trying to have passed by the next legislature, a bill for the better regulation of so-called medical expert testimony. If the profession would retain the confidence and respect of the average laymen, it must initiate a reform movement to correct this evil.

A federal judge in Memphis, trying a case in which the verdict was likely to be chiefly influenced by the expert testimony, charged the jury to the effect that expert testimony was the most unreliable of all kinds of evidence. And reading of the testimony of alleged experts in notable criminal cases fully justifies such an instruction to a jury. The modus-operandi is always the same. A hypothetical question is prepared setting forth the facts in the case on trial. Then the experts are asked: "Under the facts set forth in the hypothetical question would you consider such a person sane, or insane?" And the experts for the state will declare such a person sane and the experts for the defense will declare him or her crazy as the traditional bedbug. Or, it may be that direct examination of the person, outside of the hypothetical question, may result in the same diametrically opposite opinions. This expert evidence-matter has done more to bring the profession into disrepute, perhaps, than any other one thing. When experts oppose exactly opposite opinion on the same statement of facts set forth in a hypothetical question, or arrive at directly opposite conclusions from a direct examination, the average laymen can only conclude either that the experts are influenced by the fee, or else that their opinions are essentially worthless. This is especially true where the fees paid are extravagant, as in the Thaw case and others in which money is spent lavishly. There have been cases in which experts have been brought half way cross the continent to testify for the defense, charging enormous fees for their services and time. It is difficult to make the average layman believe that such an expert, paid by the defense and confronted with the hypothetical question after his arrival for the first time, and testifying for the defense's contention, is not merely employed by the defense to give an opinion to suit. We do not allege that an expert alienist would thus sell his opinion; we merely insist that the layman is thus impressed. And, as stated before, the average layman must perforce be impressed with one or two propositions—that of testimony influenced by fat fees, or of the fact that when doctors form opposite opinions on the same statement of facts their opinions are without weight or value. The profession owes to itself the duty of purging itself of this evil. The one way to do so is by legislation by which a state commission of physicians shall pass on such questions and their fiat be final and conclusive as far as opinions go. A limitation of the fee to be paid such experts will accomplish little, as there are too many ways of evading such a statute by "gentlemen's agreements," "gifts," and in other devious ways. But whatever plan is adopted, some kind of legislation to check this evil should be welcomed by the profession everywhere.

FINE WORK FOR COUNTY HEALTH OFFICERS.

The Journal cannot praise too warmly the splendid work being done by some of the county health officers in Arkansas. Especially must be noted the work of Dr. H. H. Niehuss of El Dorado, health officer of Union County, and Dr. O. Howton, health officer of Mississippi County.

This is what Dr. Niehuss did: Everyone knows that stagnant water is the breeding place for mosquitoes and we all know what the malarial mosquito does to the general health. Usually remedial work to destroy the mosquito larvae is confined to stagnant water on the premises of town dwellers or the filling or oiling of ponds. Dr. Niehuss observed an evil which doubtless would have escaped the notice of less keen an observer. That is the "bar pits" left along highways by road repairers. Dr. Niehuss having noted the evil, set about correcting it. He wrote a circular letter, of which he sent a copy to every road overseer in the county, calling attention to the havoc wrought by the mosquito and the necessity of attacking the insect in its breeding spots, and asking that the road overseer see that such bar pits be not left for the collection of stagnant water, and that those already existing be drained.

Dr. Howton managed, how we do not know, to induce the editor of the Osecola Times to give a whole page—or the doctor may have raised the money to pay for it; anyway, there it was—to the fly evil. The page has a border of two inches deep showing the pestiferous fly on his pilgrimages visiting the carcass of a dead dog, the manure pile of the stable, the garbage can, the consumptive spittoon, the open outhouse, thence to the home, the cream jug, the roast, the baby's milk bottle, the cake, and the faces of the sleeping inmates of the unscreened house, carrying all manner of disease germs with him. The reading matter is devoted to instructive information on the house fly and what diseases it carries. Nor is that all, for we read that Dr. Howton has arranged to have other physicians contribute articles on other subjects pertaining to the public health, so that the work will be continuous rather than sporadic.

In this connection let us remember that the legislature meets next January, and it is time right now to enlist the interest of members of the House and Senate, as well as the candidates for legislative honors, in support of the State Board of Health and all health measures that may be introduced.

Abstracts.

PARAPSORIASIS.

Fred Wise, New York (Journal A. M. A., July 15, 1916), reviews the literature of pityriasis lichenoides chronica, and describes a case of this type of lichenoid parapsoriasis in which the diagnosis was puzzling from its resemblance to lichen planus. The eruption, however, presented the following differences from lichen planus: "The papules, instead of being predominantly polygonal, were for the most part oval and round in outline; umbilication was seen in only a small proportion of the lesions, most of them presenting a smooth, glistening surface, without a trace of delling; the fine, whitish, adherent linear scaling—Wickman's striae—so characteristic of lichen planus papules, was lacking. Finally, the absence of lingual and buccal mucous membrane lesions, in a case presenting an eruption so extensive in its distribution, contributed an added element of doubt to the diagnosis of lichen planus." The histologic structure was readily seen to be that of parapsoriasis notwithstanding the less pathognomonic characters of the latter affection. In this case, however, with the support of the clinical features when thoroughly studied, the diagnosis was considered fully justified.

FEAR AS A FACTOR IN DISEASE.

The factor of fear in nervous cases is the subject of an article by H. T. Patrick, Chicago (Journal A. M. A., July 15, 1916). In many cases, he says, this factor is quite obvious but in many other equally important ones it is not at once apparent and of the latter class there are numerous varieties. One group embraces patients of known physical courage, of which he gives several instances. They fear the unfamiliar—the thing to which they are unaccustomed. German students, he says, are timid about bare knuckles but not a bit afraid of the Schläger that hacks their faces to pieces. The one almost universal fear of the human race is that which follows death, a thing of which we are absolutely ignorant. The question is largely one of temperament, and it is important to distinguish it from morbid impulse, another type of the phobias. Intellectuality seems to be no protection

against these. An interesting type of case frequently misunderstood is when the patient suffers from the physical results of the fear, but is quite unconscious of its origin. Sometimes it is easy to unearth the fear and its origin. At other times it is difficult, and Patrick relates cases illustrating these types. Occasionally the physical manifestations are pronounced, though the patient knows perfectly well that a groundless fear is the cause. To elucidate a case of phobia one must go back to the first appearance of the symptoms and investigate the circumstances surounding it. The patient has as a free requisite a hypersensitiveness or impressibility. Some are hard to account for, as are the antipathies. The remedies most frequently prescribed are absolutely futile, except for their suggestive value. Treatment must necessarilly be educational and moral, much as we would educate a child out of some propensities or habits.

EPILEPSY.

Reviewing the causes of epilepsy, F. X. Dercum, Philadelphia (Journal A. M. A., July 22, 1916), says that it is evident that in a large number of cases hereditary factors play an important part, but as to just how much, authorities differ. If all forms of mental and nervous diseases in the ancestry are included, the percentage rises, but if the inquiry is restricted to the transmission of epilepsy alone, it falls. In any case a family history of mental and nervous diseases is of great significance. We must take into account, however, other factors, such as alcoholism in the ancestry, also syphilis. In both these cases Dercum credits direct damage of the germ plasm which is proved by the signs of morphologic arrest and deviation so comonly present, and these two are merely surface indications of other and more fundamental deviations in the organism. It would appear that the impairment of the germ plasm may be general in character or special, causing the special transmission of epilepsy. There is overwhelming evidence of the direct production of epilepsy in the individual himself by intoxications and infections. This is notably true of alcohol, though lead poisoning also may have a similar role. As regards the infectious diseases of childhood the evidence is also conclusive. Another factor in the history of epilepsy is trauma, concerning which there is no dispute whatever, also sclerosis, hemorrhage, etc., of the brain. One fact is prominent in all this, namely, that epilepsy is not a specific entity, but includes many symptom groups which differ widely as to their origin and pathology. The pathologic findings are also of great significance, both the macroscopic and histologic. We meet with great difficulties when classifying the epilepsis. Some epileptics present symptoms suggesting involvement of the internal secretions. This is not surprising when we reflect that the anomalies of the glands of internal secretion are frequently closely bound up with arrest and deviations. Dercum considers the evidence of any specific cause as inconclusive, and if Reed's discovery of a germ causing the disease be admitted, it must also be conceded that such an organism can bear but a limited relation to the great and varied group of disease states included under the head of epilepsy. All these facts mentioned have their bearing on the treatment; each case must be intensively studied and the causes, so far as possible, ascertained. In the cases in which investigation fails to reveal these the task is often discouraging. Here the first indication is to secure as physiologic a life as possible, without physical or mental strain, as is sought to be given in the epileptic sanatoriums. Three other points should be borne in mind. "1. The diet should be so modified that in this organism, already toxic, as little strain as possible be placed on the liver, the thyroid and other defensive glands. For this reason the red meats are to be partaken of sparingly. The carbohydrates also are to be diminished. To take the latter in large amount is to hamper the oxidation of the tissues, an oxidation which for the obvious reason of the autotoxicity of the patient should be maintained at as high a level as possible. In the diet, emphasis should be laid on the white meats, the succulent vegetables and milk—eggs also may be permitted. Stimulants of all kinds are, of course, to be excluded. 2. The various avenues of elimination should be kept freely open. If the diet does not of itself counteract the constipation frequently present, a moderate dose of a simple saline or laxative water may be given daily. The patient should drink water freely between meals to promote the action of the kidneys, and should take a lukewarm sponge bath daily to promote the action of the skin. The bath should not be such as to promote an active reaction, but merely to favor elimination." As regards medicines, Dercum says experience teaches that chief reliance must be placed on the bromids, keeping in mind, how-

ever, the principle introduced by Richet of withdrawal of sodium chlorid. One other point is mentioned. The physiologic level of the patient may be distinctly raised by the giving from time to time of small doses of thyroid extract, one-eighth to one-quarter of a grain three times daily to stimulate the internal secretions, increase oxidation and promote metabolism generally.

RETINAL DETACHMENT.

A case of hydrophthalmia in which a detachment of the retina occurred spontaneously, the eye then going on to phthisis bulbi, which he deems worthy of report, as this outcome is not mentioned in the textbooks, is reported by Arnold Knapp, New York (Journal A. M. A., July 29, 1916). The hydrophthalmia followed an injury to the right eye by a blow four years before and subsequently removed. Both eyeballs were reported as having been enlarged from birth in the child, who was aged 11. The left eye was enormously enlarged, with all the characteristics of hydrophthalmia. The patient was observed from time to time as brought to the Herman Knapp Memorial Hospital. A similar case has been reported by Axenfeld in which a detachment was discovered by the ophthalmoscope before phthisis set in, and was stated by him to be the first observed. It seems reasonable to Knapp to assume that in cases of hydrophthalmia the vitreous degenerates in the advanced stages of the glaucomatous process and at a certain stage conditions exist sufficient to overcome the natural tendency of a glaucomatus eye against detachment, which produce a change from increased to decreased tension and a retinal detachment. This possibility of a spontaneous detachment of the retina should be considered before deciding to operate in advanced cases of hydropthalmia.

PSEUDO-APPENDICITIS.

F. G. Connell, Oshkosh, Wis. (Journal A. M. A., July 29, 1916), says that the question of acute appendicitis is settled, at least for the time being. The method and time of treatment and postoperative measures are practically uniform; delay in proper treatment is usually due to uncertainty in diagnosis and the inexcusable estimated general hospital mortality of 10 per cent. is due to the failure of some one to recognized the well-accepted principles of surgical diagnosis or treatment. The problem of chronic appendicitis calls for attention, not on account of high mortality rate, but of a more disconcerting morbidity rate—the postoperative persistence of symptoms. When a patient complains of the same symptoms after appendectomy as before operation, we may reasonably believe that they were not due to the appendix and that the diagnosis was incorrect. He divides these cases into two classes: those in which the proper diagnoses have been subsequently obtained and those in which the persistence of the symptoms has not been rationally explained, and which might be called pseudo-appendicitis. Between January, 1909, and January, 1916, he has found eighty-seven records in which the removal of the appendix or the interval operation for appendicitis had not been followed by relief of symptoms; forty-eight of these were operations of his own. During the same time there were 212 patients operated on, all told, for chronic appendicitis. He gives a detailed review of these cases, not as case reports, but analyzed according to the histories and symptoms, the findings and results. In his conclusions, he says that after eliminating all demonstrable pathologic conditions that might possibly be confused with chronic appendicitis, there remains in certain cases some cause for pain in the right iliac fossa other than the appendix, the exact nature of which is not definitely known. Such cases are frequently associated with visceral ptosis, constipation and neurasthenia. Appendicitis, either acute or chronic or when there has been an unquestioned inflammation, calls for surgery, but pseudo-appendicitis, on the other hand, is an nonsurgical condition, hence the need of a differentiation between these conditions. Every case of so-called chronic appendicitis that is associated with enteroptosis, constipation and symptoms of nervous instability should be loked on as pseudo-appendicitis, until careful and painstaking study of the history and clinical findings prove it otherwise. The advisability of seeing the patient in one of these attacks is pointed out. While an entirely satisfactory explanation of this type has not yet been found, study suggests that a lack of balance between the vagus and sympathetic divisions of the autonomic nervous system may be an etiologic factor, and this in turn may be due to an abnormal function of some of the endocrine glands.

Personals and News Items.

Dr. Don Smith, of Hope, visited in Little Rock last month.

Dr. W. E. Wisdom has moved from De Queen to Bismark, Okla.

Dr. and Mrs. W. B. Lawrence, of Batesville, visited in Little Rock last month.

Dr. C. J. Steed, of Alexander, visited in Little Rock this month.

Dr. C. B. Harrington has moved from Boydell to Wilmot.

Dr. J. M. Lemons and daughter, Miss Ethel Lemons, of Pine Bluff, visited in Little Rock during the past month.

Ex-Congressman Chas. C. Reid, of Little Rock, will address the Pulaski County Medical Society October 16, on the subject of "Medical Jurisprudence."

Dr. William Breathwit, of Pine Bluff, has returned from Chicago, Philadelphia and New York, where he has been attending the eye, ear, nose and throat clinics.

The seventh annual meeting of the American Association for Study and Prevention of Infant Mortality will be held in Milwaukee, October 19-20, 1916.

Dr. and Mrs. Charles R. Shinault and daughter, Josephine, who have been spending the summer in Horn Springs, Tenn., will return home September 1.

Dr. E. D. Erwin has moved from White to Winchester, succeeding Dr. H. Castile, who is now attending the clinics in Chicago. On his return Dr. Castile will locate at Crossett.

Dr. Chas. Prickett, Traskwood, Secretary of the Alumni Association of the U. of A. Medical Department, is revising his mailing list and requests that every member drop him a postal card at once, showing correct address.

Five hundred physicians residing in Arkansas are not affiliated with our society. Will you expend the effort to secure the application of your professional friend who is not a member? It is desired to have every eligible physician a member of a county and the State Society. Your co-operation and personal effort is solicited.

The International Health Commission of the Rockefeller Foundation hereby announces the change of its name to "International Health Board of the Rockefeller Foundation."

Dr. Francis M. Barnes, Jr., St. Louis, associate in psychiatry in Washington University Medical School, has become associated with Dr. H. S. Atkins as medical director of the Glenwood Sanatorium, but will retain his offices in the Humboldt Building for private work. Plans are drawn for a new addition to the Glenwood Sanatorium. When completed, this addition will have accommodations for twenty-six patients, the administration offices and hydrotherapeutic rooms.

The suit for $100,000 of the Chattanooga Medicine Company against the American Medical Association ended, as is well known, in the jury finding for the plaintiff in the sum of one cent damages. The editor of this Journal sent a letter of congratulation to Dr. Simmons, editor and general manager of the Journal of the American Medical Association and received the following reply:

"Dr. Wm. R. Bathurst, Little Rock.

"Dear Doctor Bathurst—Many thanks for your kind message of yesterday. Considering all the circumstances, we regard the decision as a great moral victory, and it is so regarded by the great majority, I believe.

"Again thanking you and with best wishes, I am, Yours very truly,

"George H. Simmons."

ADVISORY COMMITTEE OF CIVILIAN PHYSICIANS AND SURGEONS ON MEDICAL PREPAREDNESS.

Informally, it was brought to the attention of a number of civilian physicians that a consulting committee on medical preparedness would be desirable. This resulted in a suggestion that the Presidents of the American Medical Association, the Congress of American Physicians and Surgeons, the Clinical Congress of Surgeons of North America, and the American College of Surgeons should jointly appoint an ad interim committee which could co-operate in developing the civilian and reserve medical resources of the country to the highest point of efficiency. Dr. William J. Mayo, Rochester, was appointed Chairman, and Frank F. Simpson, Pittsburgh, Secretary.

The committee from Arkansas include: W. F. Smith, Chairman, Little Rock; M. L. Norwood, Lockesburg; C. P. Meriwether, Little

Rock; W. R. Brooksher, Fort Smith; A. C. Jordan, Pine Bluff; R. H. T. Mann, Texarkana; M. D. Ogden, Little Rock; Joseph P. Runyan, Little Rock; F. Vinsonhaler, Little Rock.

THE ARKANSAS TUBERCULOSIS SANATORIUM, BOONEVILLE, ARKANSAS.

The site of the Arkansas Tuberculosis Sanatorium, near Booneville, is a beautiful one, 900 feet above sea level, amongst the pines, high enough for refreshing breezes in summer, and not high enough for the cold fogs of winter, with a bountiful supply of excellent water and perfect drainage. The climate for the year round is unexcelled by any in the South or West, free from the winter's dampness of the Gulf Coast and from the sand storms and enervating heat of the South Arid regions and the blizzards of those farther north. The buildings are of the latest and most approved type, and are admirably adapted to the treatment of tuberculosis.

The treatment is strictly up to date, and the tables are supplied with the best the markets of the state afford. The terms are $10.00 per week. This pays for lodging, board, medical treatment, nursing and plain laundry. Bona fide residents of the State suffering from tuberculosis and unable to pay for maintenance may be admitted free on written application of the County Judge of their county setting forth these facts, in which case a charge of $5.00 per week for one-half the maintenance will be made against the patient's county.

The Sanatorium is established for the cure of tuberculosis and only those cases that present a reasonable prospect of cure or material benefit are suitable for sanatorium treatment. Patients with marked consolidation or cavities, prolonged fever, night sweats, great loss of weight, severe digestive disturbances, profuse expectoration and severe throat trouble cannot be properly cared for and should not be sent here. They can be better cared for at home. The profession and people of the State are respectfully, yet earnestly, requested not to unload their incurables onto the Sanatorium. It is an act of cruelty to send such here to be rejected, or if unable to get back home, to die here. It would be difficult to imagine a condition more forlorn than that of one afflicted with a hopeless illness away from home, family and friends, among strangers, and deprived of the tender ministries of loved ones. To avoid such conditions the Sanatorium has prepared blanks for application and medical examination. Let no one come without first having these blanks filled out and sent in. If they show the case to be one suitable for sanatorium treatment, the applicant will be promptly advised of this fact and will be called in as soon as there is a vacancy. Let no one come without first having been advised that there is a place waiting. For necessary blanks and instructions, address—

SUPERINTENDENT ARKANSAS SANATORIUM,
Booneville.

FIRST UNIT OF NEW GENERAL HOSPITAL—PLANS FOR ISAAC FOLSOM CLINIC, WITH GENERAL WARDS AND FREE DISPENSARY.

C. L. Thompson, architect, is drawing plans for the Isaac Folsom Clinic, to be erected on a plot east of and adjoining the City Hospital at Second and Sherman Streets, Little Rock. The building will be of brick, four stories and basement, equipped with electric elevator, steam heated, with hot and cold water on all the floors. The kitchen and dining rooms for nurses and officers will be in the basement.

The first floor will be devoted to the free dispensary, and a large waiting room to accommodate one hundred patients will be in the center. Special rooms have been arranged for diseases of women, surgery, medicine and allied branches, eye, ear, nose and throat, diseases of children, etc. A record room and space for the United Charities have been provided. The pharmacy and clinical laboratory will be on the first floor. The clinic will have a capacity of fifty or more free beds.

TWO LARGE GENERAL WARDS.

There will be two large general wards and five private rooms on the second floor. Ample service rooms, toilets and diet kitchen will be located in the old building.

On the third floor will be a ward for obstetrical cases, and a ward and five private rooms for children.

The operating rooms will be on the fourth floor. There will be two large operating rooms of sufficient capacity to accommodate the entire junior and senior classes. There will also be an operating room for the eye, ear, nose and throat; sterilizing room, anesthetizing rooms, surgeons' wash rooms, bath and supply rooms. Ample accommodations have been provided for the internes and

nurses. The *x*-ray laboratory will be equipped with the latest apparatus.

FIRST UNIT OF GENERAL HOSPITAL.

The Isaac Folsom Clinic is the first unit of the proposed State General Hospital. The clinic will be under the control of the Board of Trustees of the University of Arkansas, and will be administered by the faculty of the medical school. The free beds in the hospital will be open only to state charity patients.

Dr. Morgan Smith, dean of the medical school, recently visited many of the Northern and Eastern hospitals for the purpose of getting the latest ideas of teaching hospitals and dispensaries, and the Isaac Folsom Clinic will represent the latest in these respects.

Construction will begin within thirty days and the work pushed forward to completion as rapidly as possible.—Arkansas Gazette.

BATTLE CREEK SANITARIUM WILL CELEBRATE ITS FIFTIETH ANNIVERSARY OCTOBER 3, 4 AND 5, 1916.

Names sometimes designate without adequately describing. Such is the case with the Battle Creek Sanitarium which will celebrate the fiftieth anniversary of its founding on October 3, 4 and 5. This institution is a sanitarium, with all the modern and scientific equipment for diagnosing and curing disease. But it is much more. From its inception it has been in the forefront of the movement for natural, rational and physiologic methods in the treatment of the sick. Primarily, indeed, its function has been educational—the teaching of right principles of living as not only aiding in curing sickness, but preventing its return as well. The Sanitarium, therefore, has taken an active and leading part in movements for public sanitation, for diet reform, to curb the liquor evil, to check tuberculosis, to abolish child labor and more especially to study tendencies toward race degeneracy and to point out eugenic and other remedies for them.

Being purely a charity and having no dividends to pay to stockholders, it has been able in the half century of its existence to spend over $1,400,000 for the care of the indigent sick.

The program for the celebration includes a huge banquet, receptions, a big outdoor spectacle, a street pageant, with historical and allegorical floats, a race betterment exhibit, conferences on child labor, eugenics, tuberculosis and other sociological and medical problems of the day, with numerous speakers of prominence, and a Health Chautauqua.

All physicians are invited to come.

A NEW CORPORATION.

Announcement has just been made of the formation of a new corporation, called the Victor Electrical Corporation, which has purchased the business of the following firms: Vistor Electrical Company, Scheidel-Western X-Ray Company, MacAlaster, Wiggin Company, and the Snook-Roentgen Manufacturing Company.

The purpose of the new corporation is to continue the respective business policies of the above mentioned concerns, and by the elimination of waste, and the development of co-operative service, be better able to serve more efficiently the interests of the medical profession.

By maintaing a research department to co-operate with the profession in the development of this science, it is expected that more rapid progress can be made than has been heretofore, and a greater co-operation secured with the profession as a whole.

The new corporation announces that it expects to conduct its business in an entirely ethical manner, believing that there is a standard of ethics in business that conforms exactly with our ethics and traditions.

FORM OF APPLICATION FOR MEMBERSHIP IN THE PULASKI COUNTY MEDICAL SOCIETY.

To the Members of the Pulaski County Medical Society:

I hereby make application for membership in your Society and make the following declarations:

Place of birth.....Date of birth.....
Schools attended and degrees received before studying medicine.....
The names of medical schools attended.....
The name of school from which I have a diploma.....Date of graduation.....
Names of institutions I have been connected with since graduation
Date of registration in this State.....
Names of places I have practiced since graduation..... Names of medical societies to which I have belonged.....

Length of time I have resided in this county Full name of applicant.....M. D.
Recomended by:
.....M. D.
.....M. D.

We, the Committee on Credentials, beg to report our findings on the applicant named above.

EXAMINATION FOR MEDICAL CORPS, U. S. NAVY.

The next examination for appointment in the medical corps of the navy will be held on or about October 23, 1916, at Washington, D. C.; Boston, Mass.; New York, N. Y.; Philadelphia, Pa.; Norfolk, Va.; Charleston, S. C.; Great Lakes (Chicago), Ill.; Mare Island, Cal., and Puget Sound, Wash.

Applicants must be citizens of the United States and must submit satisfactory evidence of preliminary education and medical education.

The first stage of the examination is for appointment as assistant surgeon in the medical reserve corps, and embraces the following subjects: (a) anatomy, (b) physiology, (c) materia medica and therapeutics, (d) general medicine, (e) general surgery, (f) obstetrics.

The successful candidate then attends the course of instruction at the Naval Medical School. During this course he receives a salary of $2,000.00 per annum, with allowanees for quarters, heat and light, and at the end of the course, if he successfully passes an examination in the subjects taught in the school, he is commissioned an assistant surgeon in the navy to fill a vacancy.

Full information with regard to the physical and professional examinations, with instructions how to submit formal application, may be obtained by addressing the surgeon general of the navy, Navy Department, Washington, D. C.

FOR SALE OR RENT—Location for physician. Western Arkansas, within 30 miles of Fort Smith; prospective oil wells near. Unopposed practice, established for 32 years; good buggy, splendid team; fine stock of drugs. Property conveniently arranged for physician. Reason for selling, physician recently died. Terms, cash or good security. Address: W. W. Rambo, Jr., Alston P. O., White Oak Station, Arkansas. (Advertisement.)



ROBERT ANDREW HILTON, M. D.
Born October 8, 1867. Died June 24, 1916.

Resolutions of Respect.

An All-Wise and mysterious Providence has removed from our ranks, and from the community which he served so faithfully, a physician of rare skill and ability, a good citizen and progressive business man whose value to his country cannot be easily estimated.

Dr. Robert A. Hilton was for many years a leading spirit in the Union County Medical Society and his ability was recognized throughout the state. He possessed a positive character and a magnetic personality that made for him a host of strong friends who knew and loved him for his many noble qualities of mind and heart. No physician was ever more faithful and conscientious in his attention to his patients and none were so poor, if worthy, that his skill was denied them. His was an independent spirit that did not court public favor nor fawn at the feet of public opinion at the expense of principle. He shaped his voyage by the chart and compass of his own conscience, and no false light of expediency or favor could swerve him from his course once selected.

In his death the medical profession has sustained a great loss and the community has suffered by the removal of one of its most progressive citizens.

Therefore, be it Resolved, That we bow in submission to the will of Him who doeth all things well and whose Providence is just as righteous if it comes at noon or eventide of life.

Resolved, Further, That a page of our records be devoted to his memory and that a copy of these resolutions be transmitted to his wife with expression of our deepest sympathy in her great bereavement.

Respectfully submitted,

UNION COUNTY MEDICAL SOCIETY,
By H. H. NIEHUSS, *Sec. and Treas.*

New and Nonofficial Remedies.

STANDARD RADIUM SOLUTION FOR DRINKING (1 microgram).—Each bottle (60 cc) contains radium chloride equivalent to 1 microgram Ra, and 1.3 mg. of barium chloride. The solution contained in one bottle is taken after each meal. The Radium Chemical Co., Pittsburgh, Pa. (Jour. A. M. A., July 1, 1916, p. 35).

RADIUM BROMIDE, Schlesinger Radium Co.—It complies with the standards of N. N. R., and is sold on the basis of its radium contents. Schlesinger Radium Co., Denver, Colo.

RADIUM CARBONATE, Schlesinger Radium Co.—It complies with the standard of N. N. R., and is sold on the basis of its radium content. Schlesinger Radium Co., Denver, Colo.

RADIUM SULPHATE, Schlesinger Radium Co.—It complies with the standards of N. N. R., and is sold on the basis of its radium content. Schlesinger Radium Co., Denver, Colo.

RADIUM SULPHATE, Schlesinger Radium Co.—It complies with the standards of N. N. R., and is sold on the basis of its radium content. Schlesinger Radium Co., Denver Colo. (Jour. A. M. A., July 8, 1916, p. 121).

VITALAIT STARTER.—A culture in vials of the bacillus bulgaricus and the streptococcus acidi lactici in symbiosis. It is intended for the home preparation of fermented milk. Sufficient to prepare from one to three quarts of fermented milk is sent on request of the physician to the patient twice a week. The Vitalait Laboratory, Inc., Newton Center, Mass. (Jour. A. M. A., July 15, 1916, p. 203).

Propaganda for Reform.

AROMATIC SPIRITS OF AMMONIA.—This is an old-fashioned complex mixture. Its reputation has little scientific basis. Its effects probably are psychic, in the main. Such effects might be expected from the irritation of the nasal mucosa by the ammonia and to the flavor and odor of the lemon, lavendar and nutmeg oils. The physical effect is probably due to the alcohol, though the ammonium carbonate and uncombined ammonia may have some restorative action by the irritation of the gastric mucosa or by their neutralization of nauseating acids in the stomach. When the effects of ammonium carbonate are desired, this is better given in aqueous solution. When the effects of alcohol are desired, whiskey is to be preferred (Jour. A. M. A., July 1, 1916, p. 65).

THE PHARMACOPEIA REVISION.—As usual, the Pharmacopeia about to be issued will be antiquated when it comes out. Some of the drugs in it will have become more or less obsolete, while many new ones which have proven of value will not be there. Since all the publications of the A. M. A. are issued promptly and in excellent style, and are complete, correct and up to date, it is suggested that the U. S. P. should be taken over by the A. M. A., and be henceforth published by it. It may be extreme to say that the world would be almost as happy without a Pharmacopeia, but at least we could get along very nicely with a Pharmacopeia about one-half the size of the present one. A good deal of the matter it contains is quite superfluous and its deletion would prove distinctly advantageous to (1) the book, (2) to the medical profession, (3) to the pharmaceutical profession, and (4) last, but not least, to the students of medicine and pharmacy (Critic and Guide, July, 1916, p. 239).

WINE OF CARDUI VERDICT.—Anent the verdict in the recent "Wine of Cardui trial" awarding one cent damages to the Chattanooga Medicine Company, a medical journal offers condolences to the American Medical Association, declares that the verdict is "a very decided victory for the 'patent medicine' association," and asks "is publicity the way to accomplish the true end?" The outcome of the case was a moral victory for the association and publicity is the only rational means of attacking the nostrum evil, whether of the "patent medicine" or of the "ethical proprietary" variety. Until the public is

given definite and specific facts no great strides will be made in preventing unscrupulous cupidity from preying on the sick and suffering. The faith of the public in patent medicines of all sorts continues because no small part of the medical profession is itself still under the blight of the "patent medicine" business—albeit the preparations in question are euphemistically spoken of as "ethical proprietaries" (Jour. A. M. A., July 15, 1916, p. 206).

Cocain Substitutes. — Treasury Decision 2194 places "alpha and beta eucain or any of their salts or any synthetic substitutes for them" under the provisions of the so-called Harrison Narcotic Law. To this ruling the Farbwerke-Hoechst Company, the manufacturers of novocain, a synthetic substitute for cocain, took exception, and, by agreement, a test case was argued before the United States District Court of New York. It is reported that the court took the case from the jury and ordered a verdict for the Farbwerke-Hoechst Company on technical grounds (Jour. A. M. A., July 15, 1916, p. 208).

Aromatic Spirits of Ammonia in Shock.— Horatio C. Wood, Jr., explains that any stimulating effect which may be observed after the oral administration of aromatic spirits of ammonia is due either to a psychic effect or to its local irritant action on the gastric mucosa, just as the irritation by ammonium carbonate, in the form of smelling salts, of the mucous membrane of the nose may reflexly excite the medulla (Jour. A. M. A., July 15, 1916, p. 231).

Phenol Antidotes. — Various substances, fixed oils, glycerin, diluted sulphuric acid, the soluble sulphates of the alkalies and alkali earths, have been recommended as antidotes or prophylactics of phenol poisoning. M. I. Wilbert discusses the value, or lack of value, of the various reagents proposed as antidotes to phenol poisoning. He points out that glycerin will not prevent the production of gangrene or the absorption of phenol. Wilbert points out that the other substances mentioned have been found inefficient as detoxicants for phenol, and in many instances distinctly harmful. He further notes that, while the value of alcohol as an antidote for phenol poisoning has been scientifically disproved, yet even as late as 1915, the fallacy that ethyl alcohol is an antidote to phenol has been embodied in the state laws designed to restrict the sale of phenol. Recent investigation, carried out in the Hygienic Laboratory, shows that in the presence of water neither alcohol nor glycerin has any detoxicating effect on phenol (Jour. A. M. A., July 15, 1916, p. 233).

Poisoning From Lead Paints.—The reports of the British departmental committee, appointed to investigate the dangers of the use of lead compounds in the painting of buildings, shows the principal source of poisoning to be dust, produced during the mixing of dry white lead with oil, and in the dry rubbing down process. While the first danger is done away with by the use of ready mixed paints, the committee proposes drastic legislation to remedy the second evil. The committee recommends the enactment of a law prohibiting the importation, sale or use of any paint material containing more than 5 per cent of its drug weight of soluble lead compounds (Jour. A. M. A., July 15, 1916, p. 234).

Poisonous Properties of the Garden Daffodil.—The bulbs of the garden daffodil (known botanically as narcissus pseudonarcissus) contain an alkaloid (or alkaloids) whose physiologic action differs according to the stage of growth of the plant. The alkaloid extracted from the flowering bulb produces dryness of the mouth, checks cutaneous secretions, dilates the pupil, quickens the pulse, and slows and weakens the heart contractions. The alkaloid extracted from the bulbs after flowering produces copious salivation, increases cutaneous secretion, contracts the pupil, and produces slight relaxation of the pulse, slight faintness and nausea. Such widely divergent physiologic effects indicate that there must be considerable differences in the nature of the alkaloids at the different times mentioned. Since the daffodil is so common in gardens, it might be well to consider it in poisonings of mysterious origin (Jour. A. M. A., July 22, 1916, p. 290).

Hexamethylenamin in Anterior Poliomyelitis.—It has been shown that hexamethylenamin has no germicidal activities, except in an acid medium. Therefore, it is of special value only in infections of the pelvis of the kidney, ureters, bladder and urethra when the urine is acid. It cannot be expected to exert germicidal activity in the spinal fluid, which is alkaline and hence is of no value in the treatment of anterior poliomyelitis (Jour. A. M. A., July 22, 1916, p. 309).

Quality of Sodium Sulphite.—Investigation has shown that while the crystallized sodium sulphite is unreliable, the dried or desiccated form of sodium sulphite is generally of good quality and relatively permanent. A. H. Clark reports experiments showing that specimens of desiccated sodium sulphite keep for years with little deterioration (Druggists' Circular, July, 1916, p. 396).

Obituary.

William W. Rambo.—Dr. W. W. Rambo of Alston, Franklin County, died at his home, July 16, 1916, of cardiac decompensation. Age 63. He had one severe attack about a year ago, from which he recovered enough to be able to do a good deal of practice. He was an excellent practitioner, a student of medicine, and loyal to the best interest of the profession. He is survived by his wife, three daughters and one son.

County Societies.

JEFFERSON COUNTY.

(Reported by Fred C. Rowell, Sec'y.)

The Jefferson County Medical Society met in Dr. W. H. Blankenship's office at 8 p. m., July 4. An unusual amount of interest was evident. Present: Lemons, Luck, Blankenship, Lowe, Breathwit, Crump, Johns, Jordan, Jenkins, Palmer, Woodul and Rowell.

Dr. J. S. Jenkins read a paper on "Typhoid Fever," dealing very thoroughly with the subject, taking up cases as we find them in general practice, from beginning to end. The profession generally learned many years ago the importance of early diagnosis of typhoid.

Dr. William Breathwit called attention to the theory of the infection through the mesentery through the omentum to the blood channel. Dr. Johns followed in the discussion, referring to a number of cases in which he noticed a granular enlargement, those of the neck, breast, etc. Dr. Jordan closed by calling our attention to the fact that each case is more or less peculiar to itself. The importance of keeping up elimination, proper care of case and constant support in food.

He who builds up health lays up treasure in the Bank of Nature?

Efficient muzzling of dogs will eradicate rabies?

Protection of the health of children is the first duty of the nation?

PULASKI COUNTY.

(Reported by Geo. B. Fletcher, See'y.)

The Pulaski County Medical Society was called to order at 8:30 p. m., June 26, in regular session, with the following members present: Drs. Ogden, Kirby, McGill, Hudson, Fletcher, McCormack, McCurry, Snodgrass, Daly, Doyne, Carmichael, Johnston, Witt, Gibson and Freemeyer. The essayist, Dr. A. L. Jobe, being unable to attend, the usual paper was omitted.

Dr. Witt reported a case in which there had been found a dermoid cyst. In discussion Dr. Ogden reported a case of primipara in whom, after delivery, there developed a mass in the right side, which after eight weeks was removed and proved to be a dermoid cyst. The labor had been complicated, which had led the doctor to believe that the cyst had acted as a dystocia. Dr. Snodgrass reported a case of a cyst in a man occurring between the tip of the coccyx and the rectum. Drs. Kirby and Ogden discussed the different theories of cyst formation and origin.

After a favorable report of the Credential Committee, Dr. G. E. Tucker of Roland was elected to membership in this society.

Dr. Ogden, chairman of the Library Committee, reported that all Journals were being bound and that arrangements were being made for a complete indexing of the library.

Dr. Kirby reported that a floral offering was sent when notified of the death of Dr. R. A. Hilton of El Dorado.

On motion, the meeting adjourned at 9:15 p. m.

Book Reviews.

Sexual Impotence.—By Victor G. Vecki, M. D., Consulting Genito-Urinary Surgeon to the Mt. Zion Hospital, San Francisco. Fifth edition, enlarged. 12 mo. of 405 pages. W. B. Saunders Company, 1915, Philadelphia and London. Cloth, $2.25 net.

We agree with the author of this book that the sexual function is of very great consequence to the individual as well as to society in general, although most people do not care to make this a subject of conversation. "The impotent are incapable of love; for as Krafft-Ebrings says, "With all the morality which love needs to rise to its true and pure character, its most vigorous root is nevertheless sexual passion. Platonic love is a nonentity, a self-deception, a wrong designation for cognate feelings." Similarly ambition is closely dependent upon the sexual power, as it seldom makes its appearance before puberty. After

devoting a few pages to the anatomy of the genitals and with the physiology of procreation, the author describes the etiology, various types, diagnosis, prognosis, prophylaxis and treatment of impotency. The book closes with a chapter on "Special Therapeutics," in which he describes the curative methods as they are indicated in the various forms and grades of impotence.

THE CLINICS OF JOHN B. MURPHY, M. D., at Mercy Hospital, Chicago. Volume V, No. 1 (February, 1916). Octavo of 194 pages, 33 illustrations. W. B. Saunders Company, 1916, Philadelphia and London. Published bi-monthly. Price per year: Paper, $8.00; cloth, $12.00.

Among the clinical cases described in this number we find a very interesting description of the operation on Ankylosis of the Hip Joint, Dense and Fibrous in Type, from Ancient Infection; Ancient Tuberculosis of the Hip Joint—Arthroplasty; Ancient Tuberculosis of the Hip Joint with Pathologic Luxation of the Femur, and Ancient Tuberculosis of the Hip Joint—Tenotomy of Adductors.

INTERNATIONAL CLINICS.—A quarterly of illustrated clinical lectures and especially prepared original articles by leading members of the medical profession throughout the world. Edited by H. R. M. Landis, M. D., Philadelphia. Volume I. Twenty-sixth series, 1916. Published by J. P. Lippincott Company, Philadelphia.

This number gives a series of articles under the headings of "Treatment," "Medicine," "Neurology," "Public Health," "Pathology," "Gynecology" and "Surgery." It closes with an article by Dr. F. A. Craig and John Speese on "A General Review of Medicine for the Year 1915." In this article the author gives Schick's observations and studies in regard to the dosage of antitoxin.

CANCER OF THE STOMACH.—A clinical study of 921 operatively and pathologically demonstrated cases, by Frank Smithies, M. D., Gastro-enterologist to Augustana Hospital, Chicago. With a chapter on the Surgical Treatment of Gastric Cancer, by Albert J. Ochsner, M. D., Professor of Clinical Surgery in the University of Illinois. Octavo of 522 pages, with 106 illustrations. W. B. Saunders Company, 1916, Philadelphia. Cloth, $5.50 net; half morocco, $7.00 net.

This book gives the facts which are considered valuable from a study of the 921 cases of gastric cancer recited. Chapters VII and VIII describe "The Blood in Gastric Cancer" and "The Significance of Gastric Ulcer with Respect to Gastric Cancer." Dr. Albert J. Ochsner has written the chapter entitled "The Surgical Treatment of Gastric Cancer."

PELLAGRA.—By George M. Niles, M. D., Gastro-enterologist to the Georgia Baptist Hospital, Wesley Memorial Hospital and Atlanta Hospital, Atlanta, Ga. Octavo of 261 pages, illustrated. W. B. Saunders Company, 1916, Philadelphia. Cloth, $3.00 net.

In this second edition many changes and additions have been made, bringing the study of pellagra up to our present state of knowledge.

The chapter on treatment contains many therapeutic suggestions which the author has found helpful. The book does not attempt to give the cause of pellagra, yet the author expresses the opinion that we are much nearer the goal of etiologic certainty, pathologic assurance and consequent therapeutic confidence.

THE KINETIC DRIVE; ITS PHENOMENA AND CONTROL.—By George W. Crile, M. D., Professor of Surgery at the Western Reserve University. Octavo of 71 pages, illustrated. W. B. Saunders Company, 1916, Philadelphia. Cloth, $2.00 net.

The author of this book states that this lecture is in effect an epitome of a monograph in preparation which will offer the complete experimental evidence upon which these themes and postulates are formed.

The following subjects are considered: The Kinetic Mechanism; Functions of the Adrenals and of the Thyroid in the Kinetic Drive; Control of the Kinetic Drive; the Chronic Kinetic Drive; Kinetic Diseases, and the Surgical Methods of Controlling the Kinetic Drive.

THE UMBILICUS AND ITS DISEASES: EMBRYOLOGY, ANATOMY, AND DISEASES OF THE UMBILICUS, TOGETHER WITH DISEASES OF THE URACHUS.—By Thos. S. Cullen, Associate Professor of Gynecology in the Johns Hopkins University. Large octavo of 680 pages, with 269 original illustrations and 7 plates by Max Brodel and August Horn. W. B. Saunders Company, 1916, Philadelphia. Cloth, $7.50 net; half morocco, $9.00 net.

This volume presents a wealth of instructive material dealing with the omphalomesentric duct, and is the only book at the present time that gives a full knowledge of the umbilicus and its diseases. At the beginning of each chapter a synopsis of the subject is given and then the cases are cited more or less in detail.

The anatomy of the umbilical region, as viewed from both its outer and inner surface, is carefully described and very comprehensively illustrated.

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FOR FURTHER INFORMATION WRITE DR. WM. R. BATHURST, EDITOR, 810 STATE BANK BUILDING, LITTLE ROCK, ARK., OR OUR ADVERTISING REPRESENTATIVES, THE CO-OPERATIVE MEDICAL ADVERTISING BUREAU, 535 N. DEARBORN STREET, CHICAGO.

THE JOURNAL OF THE Arkansas Medical Society

Owned and Published Monthly by the Arkansas Medical Society

LUME XIII
No. 4

LITTLE ROCK, SEPTEMBER, 1916

Yearly Subscription $1.00
Single Copy 25c

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THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIII. LITTLE ROCK, ARK., SEPTEMBER, 1916 No. 4

Original Articles.

EROTOMANIA.*

By Thos. Douglass, M. D.,
Ozark.

Erotomania is sex madness; a more or less permanent erotoeism whieh so eolors the whole life as to prevent rational ideation on any subjeet. These effeets are not always apparent; the eonelusions on any subject of one so affeeted eannot be trusted. Exeessive attention is paid to sexual affairs. Erotomania is a widely prevalent disorder. This is an age of erotomania. History presents more lieentious times, but the present being more conseious, has the graee to be ashamed in some measure. Literature and art are full of erotomania and the stage is supersaturated. That is to say, on the stage erotoeism is frankest. The stage folk simply play up to the erotoeism of the audienee. They try to give us what we want. The reeeption given Ziegfeldt's "Follies" in St. Louis is strong evidenee and shows also that the disorder is not eonfined to the lower walks of life, but ineludes all elasses. The following is taken from William Marion Reedy's Mirror:

"Here have I been 'thundering in the index' against the failure of the people to support the theater, and lo! along eomes Ziegfeldt's 'Follies of 1915' and the Olympie is paeked nightly from 'turret to foundation stone'—people even in the galleries. Mrs. Pat Campbell played to audiences emphasizing vaeaney. Otis Skinner played 'Cock o' the Walk' to an audienee so small as to be hardly respeetable. Elsie Ferguson wept between aets beeause of lonliness. Maude Adams barely made expenses. Here are the 'Follies' and Broadway jammed with the automobiles of the elite and the hautton and the jeunesse doree. The eollege club, to be sure, gave Cyril Maudes Company in Grumpy a splendid part on a sueeessful week, but the 'Follies' are good for a paeked houses for two weeks if they eare to stay.

"Evidently the people will go to the theater to see what they like. The "Follies" is what they like. Now what is, or are, the "Follies?" Light, eolor, musie—and sex. Indeed, the light, eolor and music are ineidental to the sex. In this partieular of sex this show takes its eue from the fashions of the street. It brings into prominenee the female leg divine. Legs in rapier play on Italian marble seats, legs hanging over the feet of beds, legs turned and locked about men's waists. Legs beautifully bare or elothed so as to make bareness more desirable. The apotheosis of the leg. Adjunetive to this, splendid seenery and lighting, pleasant music and costuming of riotous if elegant variety. I don't believe any show ever given here was more generous in revelation of those mysterious middle distances it is the function of skirts to eoneeal. The acuteness of contrivanee to make those equatorial regions insistent by means of fabries so fine that searee anything lies between them and airy nothingness, is the elimax and ultimate of the sensuous, not to say sensual, magie of the feseininity of femininity.

"There is one great aetor in the show—Bert Williams, the negro eomedian. For the rest—muliebrity on parade, with moments of orgiastrie laseiviousness.

"This is what the publie wants and likes. Not hoi polloi either, but the best soeiety, even many of Mr. Pereival Chubb's 'edueated minority.'

"St. Louisans explain the failure to attend good plays by saying the town has moved away from the theaters. What the explanation amounts to is shown by the paeked houses at the Olympie this week. The 'Follies' would get the St. Louisans if it was twiee as far away; they would jam the bridge to get to it in East St. Louis. They say the eause of the vogue of sueh attraetions is that

*Read before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2, 3, 4, 1916.

the world is oppressed by the horrors of the war. Bunk, pure bunk. In days before the war, kindred shows like those of the Rogers brothers had the same pull. St. Louis likes the flesh-reek. There's nothing that's wrong but St. Louis' taste, though it is not wholly unlike other cities in this respect."

Yes, every other city, small town and county would follow suit. Many a good citizen perfectly correct and upright at his home in the country town, when he strikes the city heads first for just such performances. Dramatic art of high quality goes begging, while an exhibition of erotocism draws crowded houses. Clearly, erotocism is the stage's strongest, most effective appeal. The modern dance also is strongly erotic. A. A. Brill says that it is a substitute for sex union. That it is wonderfully attractive to many people is easily explained.

The dictionaries define erotomania as a form of mental alienation due to love-sickness. This seems to me to lack comprehensiveness. It is both more and less than that. It seems to me more correct to say that it is a mania short of actual madness. It is not nymphomania and satyriasis, although these are included; as a rule, the affected do not indulge in these excesses. It is my opinion that the degree of mental alienation is not sufficient to absolve one from moral responsibility. The erotomaniac should be punished for his crimes. The ends of justice and the good of society are not subserved when one commits a cold-blooded murder and escapes his just punishment on a plea of insanity, is confined to the hospital for nervous diseases for a time, and is then released because he is not insane.

Not only Harry K. Thaw, but his wife and Stanford White also, had erotomania. Not his plea of insanity, but the Thaw millions, prevented his electrocution. The New York sense of justice and Jerome kept him confined a long time in spite of his millions. In a strict sense these people are not insane. They have a degree of alienation which renders uncertain and unreliable their mental processes. They should not be trusted as leaders and their conclusions must be taken with a grain of salt. That is to say, their evidence in any matter of importance is worthless unless corroborated by normal persons. They are not seldom poets, writers, musicians, artists, sometimes of great ability. We may take pleasure in the products of their genius if at the same time we recognize their limitations. One may enjoy the wonderful technical skill of Blind Tom, who was an idiot-savant, but would never think of considering his judgment on a question of musical interpretation. Walt Whitman, a wonderful exponent of a new kind of poetry which strongly resembles a very old kind—that of the Old Testament—a poet of modern democracy, is not by any means to be despised because of a homosexual erotomania. On the other hand, it becomes a matter of very serious importance, fraught with tragic consequences and widespread disaster, when the false conclusions of an erotomaniac philosopher like Nietsche dominates the philosophy of a great nation. Countless numbers of erotic writers induce erotocism and erotomania in the young. Many novels fairly reek with erotocism. It is astounding that so good a writer as Gouvernor Morris should all but present the sexual act in one of his short stories. A young man is deeply in love with a rich young widow whom he is too proud to marry because he will be dependent upon her wealth. She is entirely willing to marry him and considers his pride foolish. He urges delay until he can himself win wealth. During a rainstorm they take refuge in an unused stable. Loud thunder claps so frighten the lady that she clings to him. Presently he forgets the storm and thinks only of the woman in his arms. His pulses are singing. He kisses her and she, limp in his arms, returns his kisses. * * * Presently she points up to the roof of the barn which the lightning has set on fire. They rush out, the rain has ceased, and on the way home he assures her that now they must of course be married. She laughs softly to herself, for has she not won the husband she wanted, and what can he say about morals now that he himself has slipped. This appeared in the Cosmopolitan, I believe, and is as bad as Mollnar's play, "The Devil," which is quite as open. Tolstoy is not free from erotomania. He is obsessed with filth and obscenity called realism.

It is well understood that between sanity and insanity no fine distinction can be made, —that there are degrees of mental alienation. Characteristic of erotomania, is a perverted psychology. The subject is not more illogical than the average citizen. The mental structure they build up may deceive anybody and greatly mislead people of high intellectuality.

It is difficult to show the falsity of their reasoning. In fact, it is only necessary to show their mental unsoundness and that therefore they are not to be trusted in a crucial decision. The incorrect reasoning of erotomania is due to mental unbalance. False conclusions may lead to crime. It may be asserted that all criminals lack mental balance; they cannot be excused on this score. But for perverted mental processes there would be no crime. Plato alleged that vice is a disease of the mind.

Modern thought recognizes the perverted psychology of the criminal and hence the tendency of the time is to treat him more humanely, as one who needs to be restrained and guided rather than punished.

The degree of alienation in erotomania is not sufficient to absolve one from moral responsibility. It is mania short of actual insanity, although coexisting with it not infrequently. The ideals of the erotomaniac are often ignoble. Nietsche admires a blonde beast and worships physical power which he absolves from all responsibility. No law, moral or otherwise, binds the superman. He is a law unto himself. He needs no other justification than the power to enforce his will upon others. According to Nietsche, the dominant ideas of morality are those of a slave morality due to the overthrow of the master morality by the slaves. This slave morality originated with the Jews. Much of Nietsche's writings sound like the ravings of a madman. Max Nordau says he was confined to an asylum, and I believe he died insane.

Erotomania does not cause insanity, but the insane are often highly erotic, probably because of a removal of the higher inhibitions. I want to insist upon this distinction, that the erotomaniac is not insane, yet he is mentally unsound. In spite of his sanity and manifest erotoeism, Nietsche was able to build a wonderfully plausible system of philosophy that dominates Germany and extensively influences all civilized nations. Nordau devoted considerable space to Nietsche in his book "Degeneration," because he said the Nietsche cult was extending everywhere. The present great war is the logical outcome of Nietscheism. The intellectual superstructure of erotoeism controls the destinies of Europe.

Erotomania often leads to crime—and crime of the most horrible kind. The negro rapist who ravishes and then destroys his white victim is an erotomaniac. He doesn't destroy his victim in an attempt to conceal his crime, but in a fiendish sexual delight in taking her life. He is a Sädist. Let those who can, believe that Leo Frank was such an one. There was a negro in the wood pile quite visible. Erotomania without restraint has never characterized the Jewish race. It is quite common with negroes. But whoever committed the crime, both Mary Fagin and Leo Frank were victims of erotomania of the Sädist variety.

Sexual perversions of all kinds are closely allied to erotomania and often associated with it. Not all erotomaniacs are perverts, but all perverts are erotomaniacs. Sexual perversion is not at all uncommon. Many cases never come to light; some have occurred in our county. A man under the guise of organizing a secret order practiced pederasty with the boys as a part of the initiatory rites. He was tried and sent to the hospital for the insane, where he was confined for a time. It should be borne in mind that some cases are actually insane. Many insane have erotomania. Insanity and erotomania and all forms of sex perversion are stigmata of degeneration and their association is not uncommon. Crimes of jealousy are generally the result of erotomania. Entirely too many cold-blooded murderers escape the penalty for their crimes, pleading the unwritten law. They get by so often on this plea because of the erotomania of the public.

A notable case occurred in Franklin County, in which the mental disturbance was mistaken for insanity and there was a gross miscarriage of justice. Mr. X went out into his neighbor's field and killed him. With three other doctors summoned as experts, I listened to the evidence. Through several days this man unfolded a remarkable tale. It was the old tale of violent jealousy founded on suspicion. This man was a public official of irreproachable character, with a wife and grown daughters of the highest respectability. There was no evidence that anybody but the husband suspected anything wrong with them. This family was one of the best in the community. He was convinced that not only his wife, but his daughter, was unfaithful. From one suspicion to another he finally comes to believe that his wife, daughter and a number of men in the neighborhood—all married and some of them lifelong friends—are all in a conspiracy to murder him and get him out of the way so that they may without hindrance give free

rein to their lust. He believed that once when he came home they would have killed him but for the inadvertent appearance of one who would have been a dangerous witness. Just when his suspicions began to take form is not stated, but he had lived with his wife in happiness for several years and they had several children. It seems, however, that he began to suspect his wife from her lack of ardor. He speaks of "pleasure periods" in their relations; these are periods of inordinate and protracted indulgence. His wife endures this sort of thing for twelve years. It is not surprising that she finds it difficult, unless she herself had nymphomania. The trouble apparently dates from her increasing lack of interest in these pleasure periods. One infers from his own evidence that she tried to comply. After his suspicions are awakened he remembers a number of incidents which to him indicate her unfaithfulness. He remembers that before their marriage he was going to church with her one evening, she pleaded not feeling well, remained at home while he and the family went to church, leaving her and the children and an uncle at home. On their return they find she has gone to bed. After their marriage she confesses to him that she took the children and went upstairs to bed to avoid seduction by the uncle. After their marriage she pays visits to this uncle and he is convinced of improper relations between them. He says she told him after they had begun to quarrel over the matter that she would not have married him but that her own father wanted to keep her in improper relations. Again when they had several children, on one night she, in returning to bed in the dark, mistakes the bed occupied by his father, soon finds the mistake: they laugh over it next day. But her actions indicate to his inflamed imagination that she was entirely willing to an improper relation.

A large number of incidents are given to indicate the improper relations with the neighbor whom he killed, all of which are purely circumstantial and extend over a considerable period of time. They are unconvincing to anybody but him. It is not clear why he depends on shadowy circumstantial evidence when such relations carried on from time to time are easily detected. There is only one occurrence of which he feels positive. On one Sunday they go over to the neighbor's house, he by the road, she across the field; when he arrives, the neighbor is not there; the neighbor's wife answers his inquiry in a way that indicates to him that she understands that a clandestine meeting has been arranged. In the trial she denies any suspicion of any improper relation between her husband and this woman; afterward he follows his wife's tracks through the field, notes when she turns aside through a thicket, and also notes a man's tracks coming from the opposite side, also notes where they have stood together. He never directly charges her with this, but whenever they are near this spot he refers to it and accuses her by inuendo and regards her words and acts as indicating her guilt. They have many hot discussions on the subject. When she finally realized that he actually believed her guilty of infidelity she left him and went to Oklahoma, where she has lived since. This was two years before the tragedy; during two years the flames of passion and jealousy, now intensified by an ungratified or only partially gratified erotomania, and helped along by some degree of alcoholism, haunt him perpetually and drive him steadily toward the tragedy. There is some report of illicit sexual relations during this period. However, it appears that the opportunities are wholly inadequate. He is obsessed with the idea that a confession from his wife or this neighbor would relieve his mind and clear up the intolerable situation. He thinks it would be a simple matter to talk it over in a friendly way with this man and a frank statement from him would be satisfactory. At last, one day he went to this neighbor's field where he was plowing, taking a gun along because it was reported to him that this man had threatened him and is a more powerful man, and he believes that this neighbor intends to kill him and get him out of the way. He does not intend any violence, he says, only a friendly talk; but when he arrives he demands a confession. The neighbor denies anything to confess, advances toward this man and is shot down. The murderer goes to another neighbor's house and declares that he had done what he ought to have done a long time ago. There is evidence that he intended to kill two other men, but his plans miscarried. All these circumstances he recounted in endless sickening detail. Unmistakably the man is not insane, he has erotomania. During his wife's absence it was reported he wanted to take a young unmarried pregnant woman to his home. Illicit relations were supposed to exist between them. A neighbor taking care

of his home objected and prevented it. After listening to this man's long-drawn-out story the other three doctors said he was certainly insane. I said he was not. His lawyers pleaded insanity. The court and the prosecuting attorney were also convinced, and the judge instructed the jury to bring in a verdict of insanity. Soon after he was admitted to the hospital for the insane, I understand that Dr. Greene said he was not insane. My evidence was not submitted to the court or jury, because the verdict of insanity suited everybody. And I was not a specialist in insanity, and there were three against me. This method of using expert evidence for deciding so important a question as the sanity or insanity of a criminal seems to me open to serious criticism. The law should be so amended as to permit a much more rational procedure, namely: If during the several months this man was kept in the county jail awaiting his trial, he had been committed temporarily to the hospital for nervous diseases and his condition there determined by expert alienists having the opportunity to watch him for several months, a more just verdict could have been rendered. This man was recently released as being perfectly sane. Here two homes are wrecked and the happiness for life of a number of people destroyed by one man's erotomania. Certainly the subject is worthy of most serious consideration. Of all people, the physician should have clear ideas on the subject. It is his opportunity to observe the first symptoms of erotocism in the young and to give sound advice as to its suppression. He has the authority and the opportunity often to advise as to a normal sexual life. The views of many physicians on this subject are none too strict. How often are the sexual irregularities of a young man condoned. Illicit intercourse is just as evil for the boys as for the girls. No man should condone it in boys unless he is willing to furnish the girls. The profession is generally awake to the tremendous evils of venereal diseases. It cannot be contended, as it was a short time ago, that sexual continence is unhealthful. It is far more wholesome than illicit indulgence. You remember Sophocles saying that he was glad to be delivered from the passion of love. How do you feel, Sophocles, as to the pleasures of love? Are you still able to enjoy them? "Softly, friend," replied he, "most gladly indeed have I escaped from those pleasures as from a furious and savage master."

Prostitution feeds upon erotomania and erotomania induces prostitution. No one else has the physician's opportunity to set people to thinking right in regard to sexual affairs. He himself must have clear ideas untinged with erotocism. It is perfectly astonishing how many good people are willing and anxious to commit abortion. I suppose every physician has numerous applications and these would be greatly increased if he were in the habit of complying. These tendencies are vastly debasing. The justification for sexual union is procreation, not pleasure.

The home is the most splendid accomplishment of civilization, the very foundation of a permanent civilization, in its highest development one of the most civilizing of all agencies, the best place on earth for anyone; at once a harbor of refuge and a place of rest and peace whose vitality depends upon a good woman of whom Solomon said that her price is above rubies, and a man who holds himself to the same moral standard. This place, the consolation and satisfaction of mankind, is menaced, is endangered by erotocism and erotomania.

Let the erring man who urges strong passion as an excuse, consider that his daughter, untried and unenlightened, in her hour of temptation, will need all the moral support of a continent father to bring her safely through. For through him she also inherits vicious tendencies. If men are bad and women good, then their daughters would be half bad and half good. Whether goodness is a dominant and evil a recessive characteristic is an open question.

We know whither our duty and therefore our pleasure leads. After the terrible consequences of her erotomania had come about, Queen Guinevere lamented, "It was my duty to have loved the highest, it was my pleasure had I known." Out of sex love have proceeded some of the finest things in art and literature. Woman is man's highest inspiration. Without her he is a brute. With her he is sometimes worse. The most fatal mistake a man can make is to marry the wrong woman. Into this error he sometimes falls through his erotocism. When he follows his erotic impulses, the nearest attractive woman will do; when his highest instincts and his reason are guiding him in selecting a lifemate, he is immensely more careful and then he does all that he can do individually for

the cause of eugenics—he selects for his children the best and finest mother he can.

The remedy for erotomania:

1. Elimination from procreation of the unfit.
2. The extermination of prostitution. There is no power to reform a man except himself, but society can help him greatly.
3. The abolishment of alcoholism, which so greatly helps prostitution.
4. A sense of morality should be aroused in men that would jerk them up to the same standard they require of their wives.
5. The young must be adequately instructed early. Intelligence can find a way to do it properly. It can be done by co-operation between parent and physician and teacher. At least yearly inspection of every individual by a competent physician would be conducive not only to general, but also to sexual health.
6. The modern dance should be discouraged as strongly inducive of erotocism and erotomania.
7. We need only to recognize the disorder to put the affected individuals in their proper place and avoid being misled by them.
8. And the great antidote for strongly erotic tendencies is that suggested by Dr. Osler—*hard work.* Every man should have some work, and the Lord knows there is plenty to do, which will absorb all of his energies and all of his time.

William James said that all of us habitually use only a small part of our energies, that by a full use of them our accomplishments could be vastly increased. And the things we can find to do are tremendously interesting.

"The world is so full of a number of things,
That we should all be as happy as kings."

DISCUSSION.

Dr. C. S. Pettus (Little Rock): The definition of erotomania is so varied that to study it from that standpoint, we should hardly know in what way to accept its meaning.

From my investigation of the definition, I am of the opinion that in defining it "sexual madness," Dr. Douglass has given it a very good definition.

It is a condition of absorbing interest; it is a condition of much importance and it is a prevalent condition. It is an occasional symptom of paranoia which places it under the head of psycosis.

Erotomania in its worst form is a pathological sexuality, and a pathological sexuality is so much harder to get in to to make the investigation necessary, to get a working basis, than that of normal sexuality. For this reason, we are prone to overlook its existence.

The withholding of the truth by those suffering with erotomania does not give us opportunities to learn of it that we may know enough to eradicate or assist in eradicating it.

Its two main etiological factors are alcohol and inheritance, and to these we might add environment and subdivide environment into association and immodest dressing, which displays the limbs of the female, that is due to the unfortunate fashions of today among them.

The nudeness of the stage; the many suggestive pictures that are constantly confronting the public; adhered prepuce and clitoris.

As I have suggested, the lack of frankness on the part of those suffering with erotomania places us where we cannot investigate it thoroughly.

Those who suffer with erotomania, to some extent, are dishonest and are never frank.

(I am of the opinion that frankness is one of the greatest characteristics of a well-balanced mentality.) Those who suffer with this unfortunate condition will not tell the real truth about their disease. They will not go into details of their condition, that we might be able to investigate it; therefore we are forced to add and deduct, and in many cases our conclusions are not correct.

That we should take more interest in erotomania and should make a more thorough investigation, none can deny. Erotocism is so well borne that we are almost unable to speak of any matter pertaining to sexuality without creating in the minds of some people impure or vulgar thoughts. I am in a position to speak with some degree of authority on this point and can assure you that it has been thoroughly demonstrated to me.

We can do much toward controlling erotomania by eliminating many suggestions that are constantly before our eyes, but this will never be done through reform work in the churches. Until the medical men interested in the scientific study of life show the interest in these matters that it is their duty to show, the church reformer will not be able to appreciate the magnitude of the subject.

We can use prophylactic means—such as examining the clitoris of the female and the fore skin of the male. From a physical standpoint circumcision will have much to do in controlling abnormal sexuality. An improvement of fashions, elimination of nudeness from the stage, would be of some value.

I am of the opinion that there is more self-abuse among girls than is imagined. In most instances this comes through close association of girls.

In choosing a companion for the girl, much can be accomplished by considering who your girl associates with, and keep the girl's mind pure. The male's associates should also be considered.

A higher development of morality in every respect will assist greatly in the elimination of erotomania, but this higher development of morality will never come around until our profession takes the interest in it that we should take and are willing to go into the matter from a scientific standpoint and eliminate vulgarity when sexual matters are discussed.

We should exhibit the earnestness which the problem deserves—in fact, the same earnestness should be shown by our profession in developing an interest among the laymen to eliminate erotomania as much as possible, as the preacher shows in the education of the laymen concerning the sacrifice of Christ in giving up His life for our souls' salvation.

Dr. T. M. Fly (Little Rock): I am not an authority on this subject, but I think two reasons for the propagation of it is idleness and too much talk about it.

Dr. R. C. Dorr (Batesville): I want to ask Dr. Douglass, in his closing discussion, to tell us where erotomania ends and insanity begins. Referring to the plea of insanity in these crimes, I think if we had a law that all people, after they were exonerated through this plea, were sent to an asylum for life, it would stop a great many of these pleas.

Dr. Mitchell (New Mexico): I think, with these cases, the better plan would be to nip them in time by sterilization. I believe that every criminal should be sterilized. I read a paper a few years ago before the State Medical Society at Jefferson City, Mo., advocating that, and was criticised all over the land. I believe the people should have instruction in the subject of criminology. I think that the method we use in dealing with undesirable animals should be practiced the same way in dealing with the undesirable man animal—sterilization. We will find in all cases, after investigation, that environment and heredity should be looked into carefully. Every child that is born from a criminal parent should be closely safeguarded, and the best environments thrown around him or her that possibly can be used. Until that is the case, our work will be futile.

Dr. Chas. L. Gregory (Greenville, Tex.): To me this has been a timely and most interesting paper; it has the smack of classical ability eloquent and to the point.

With reference to the man possessed with delusions about his family, wife and daughter, will say that he was insane and should have been placed in a hospital for the insane for observation and treatment.

The increase of perverts and the insane will never be checked in this or any other country until the masses rise up and demand certain laws authorizing segregation and vasectomy on the male and female in order to stop their kind. As long as the people permit the culls and unfit to propagate their kind, just that long will we be burdened and held at public charge with the class of patients discussed in this most excellent paper.

Every idiot, every insane person, every habitual drunkard, every syphilitic, every epileptic in the land should be prohibited by law from marrying and begetting their kind. (Applause.) Because, just as long as we turn the syphilitics out to go into the parlors and court the fair daughters and marry them or give them syphilis by a kiss as they leave, so long will we have degenerates and the insane born to us, and just that long will we have Thaws and other such misfits going over our commonwealths shooting the lives out of men.

We care for epidemics of smallpox and other infectious and contagious diseases, and the chief mystery of the hour is why men of learning, intelligent physicians of the states, do not rise up and register their protest against syphilitics going in and out of the parlors of this country disseminating this disease of destruction and death. Why become so greatly exercised over a little epidemic of smallpox, scarlet fever or diphtheria, and permit syphilitics to move in society and cause children to be born diseased, blind and dead?

Dr. Pettus, who opened the discussion, spoke of the double standard of morals and about the young girls and boys coming under each other's influence. My prescription to check this is plain and practical. A few weeks ago, on the streets of my city, Greenville, I saw a young man walking down the street holding the arm of a young lady. I remarked to a Baptist preacher, "If that was my daughter, I would take that young man by the back of the neck and throw him off the sidewalk, take my daughter home and direct her to stay there until she could walk alone." Gentlemen, such familiarity on the part of our young is damnable; it is wrong and should be abolished. No good can be subserved by it, and the manhood of this country should rise up and say to their daughters, "Don't you permit a young man to walk the streets under the glare of God's sun, or under the electric light, holding you by the arm."

As long as we tolerate a double standard of morals for men and a single standard for women, just as long as we permit the environments we now have, just that long will the class mentioned in this paper be born and the taxpayers be called upon to hold them as public charge.

Thanking the doctor for this most excellent paper, am glad he read it, and hope he will "come back" with another paper. This is a line of education sadly neglected. There ought to be more papers and discussions along this important line, and, when we become sufficiently courageous enough to follow his wise counsel, we will cut short the breed of Thaws, degenerates, perverts and criminals in this country.

Dr. E. H. Martin (Hot Springs): I wish to thank Dr. Douglass for his excellent and interesting paper. I think, however, that his plans for the suppression of erotomania are quite impracticable, as are those of Dr. Gregory, who has just spoken.

Both the paper and discussion have left the subject of erotomania and have gone to that of public morality. Erotomania might exist in the most perfectly moral community, as we are bound to understand that it is an abnormal condition. We must be honest enough to recognize the fact that a certain amount of sexual desire is normal in all individuals, and often what might be called excessive lust is not abnormal in some cases and does not constitute erotomania. Erotomania is defined as "Emotional insanity characterized by exhibitions of sexual desire;" but, to return to the discussion, regardless of the title.

A single or double standard of morals has nothing in the world to do with erotomania. It is all very well to advocate a single standard of morals, but the only way that could be possible would be to permit the females of the race the same privileges that are given the males. This we would not dream of doing, nor would they desire such privileges.

It is useless to advocate the impossible, and men have not reached the stage of development where sexual continence can be expected of them in mass. Individuals doubtless practice continence, but that will not be the rule as long as nature has made men as they are.

Nature has provided the various glands in the body with functions which it is useless for us to oppose. As long as men have thyroid glands in perfect order, their circulation and other functions will be properly regulated. Let these thyroids increase and give out an abnormal amount of secretion, and the patient is a changed being. The pituitary gland decides whether an individual will be a dwarf or a giant or a human being or normal size. And the condition of each man's sexual glands decides whether he will be continent or not. Moralizing is all very well. A man who leads a normal married life or whose sexual glands are not functionating highly, may very well advocate chastity in men, but an uncomfortably full seminal vesicle will influence a man's mental actions and thoughts and feelings just as irresistibly and certainly as too much thyroid secretion will increase his pulse rate.

We are not honest with ourselves and much is said in a discussion like this because it sounds well. In fact, nearly all of these present are married men and have no knowledge of continence, so I think that it is absurd for us in our ignorance to advocate a

single moral standard. It is equally absurd to advance the idea of vasectomy in the discussion of this paper. Vasectomy may be very useful, but has no effect on the patient's erotic mental condition, nor does it incline him to chastity.

The only salvation for us as a race is one that we are getting further away from, that is *early marriage*. Young men now wait until they have worn themselves out with libertinism and are not fit to be any girl's husband, before they are married. Girls go through college, and, while still able to functionate, they have in many instances made themselves impossible and uncongenial companions. If boys and girls were married when they were from eighteen to twenty-two years old, there would be few cases of erotomania or even immorality.

We would not prescribe starvation as a cure for hunger, neither is absolute continence a cure for erotomania. Quite the contrary, and we see the most numerous cases of sexual perversion and erotomania where numbers of one sex are herded together. Sometimes in boarding schools, often in the army, and especially in the navy, frequently in asylums, and almost universally on penitentiary farms.

Giving each man a wife and giving her to him early will not prevent all cases of erotomania or perversion or lustfulness, but it would minimize them very greatly and is the only method which I think could be nearly successful. You may say that it is not practicable, but none of the other methods advanced here are feasible either.

Dr. A. G. Lee (Texarkana, Ark.): This is a most valuable paper, and the author has shown not only skill and ability, but the most profound study, and I for one am truly grateful for the occasion to hear one so valuable. We may differ somewhat in technicalities and methods of handling the situation described, but no one can deny that it is a serious subject and will always engage the attention of mankind.

For the existence of every being there are two fundamental necessities governd by the laws of nature—reproduction and preservation. These encompass all there is to the human existence, as well as animal and vegetable life. And as the sexuality of man pertains to reproduction, and is essentially as normal as is metabolism, he who would advocate assexuality or universal continence, is making a poor apology for even a pathological condition and its results more extreme and disastrous in one direction than erotomania would be in the other.

Humanity, as creation's highest accomplishment, has ascended to a sphere of the widest range of development—mentally, physically and otherwise it is far beyond its fellow-creatures, and the sexuality has, of course, kept pace. The evolution of simple protoplasm engages the act of reproduction (and sexuality), as much so, in a sense, as the highly developed human, the only difference is in degree and intensity; and over the scale of evolution there is no discord in the advancement of every specie, and the higher the type, the higher the development of its sexuality. The protoplasm, the pollywog, ape, and the human are but so many wide steps in the scale of development, though man may never have been ape, or ape a tadpole.

This discussion is not intended to justify erotomania or discourage the attempts at its control, but rather to disabuse the emotional mind of any great danger from the present condition, and prevent a erotomania-phobia. Erotomania is an insanity, and like all other forms, has no distinguishing line between normal and abnormal; the extremes are beyond tolerance are the recognizable conditions as a menace to public welfare, and it is only in these extreme conditions are we justified in attempting control by as violent means as vasectomy and salpengectomy. Someone said, "You can't produce a virtue by an act of parliament," to which may be added, Nor an atomical dissection or surgical operation.

The many ideas advanced by eugenic authorities, dealing with civic development, such as teaching of sexual hygiene, limitation of offspring, inhibiting the procreation of undesirables, are only renewed efforts along the line of progressiveness which have been tried out, it is believed, even in prehistoric ages, as far as their knowledge had advanced at that time. Castration was practiced, but not vasectomy, because they knew nothing of the vas, and it was within the last hundred years that anatomical knowledge was sufficient to undertake ovarotomy. But no such fanatic attempt will make a decided impression upon the world.

I do not think it necessary for us to become alarmed over the situation. The process of cure is going on all the time. It is a process of education. And I am optimistic enough to believe that our condition is more satisfactory at present than ever before in the history of man. If anyone here thinks this age has developed a monopoly on erotomania or its allied sexual irregularities, I would refer you to some of the tales of Boccaccio, ancient literature, and even the Bible, where you may find erotics in the ages long gone by. Education and civilization are gradually eliminating these things. We see them plainer today because of our efficient means of communication, our telegraphic, telephonic and daily papers give us advantage of learning the things that are going on, which is also the greatest factor in our educational development.

One of the greatest influences that is brought to bear upon this condition in man, is the impression made in the first years of maturity, when the sexual organs are in their functional infancy. The age between puberty and matrimony. There are from five to ten years of life of every young man or woman that is sacrificed, or lost, or not provided for sexually. This sacrifice is not voluntary, but advisedly or compulsory. If continence could be completely enforced at this age, no harm could follow; if advisedly observed, it might be stored away with relics of sentiment as moral treasures. This in the female, no doubt, is frequently and usually the case. But this age, above all others, is the most desecrated morally. It is in this age that 80 per cent of the venereal diseases attack the human family. It is in this age when 80 per cent of the young womanhood find their way to the life of prostitution. It is the most essential part of the whole sexual life. It needs a reform in its method of attention. These creatures must not be permitted to go wild, and lost in these matters. The indiscriminate sexual engagement is never permissible, and when it is considered, that sexual intercourse is naturally permissible only when procreation is intended. It is obvious that the solution of this problem is yet in the very distant future.

When we consider some of our precivilized customs we are to be commended for our moral altitude, to which we have ascended. Prior to the time when we had any knowledge of a Divine Creator, man as a worshipful creature began to take notice that the sexual organs were concerned in the creation and propagation, and with his crude knowledge and wisdom these organs naturally appealed to him as the most appropriate precedent to a more rational creature of worship—the Divine Creator. He therefore worshipped these organs. And rulers of tribes—chiefs and kings—set up images of these organs, just as they did the bull and other things as idols, for themselves and their followers to worship. These images were erected in two forms, one in the form of an arch, representing the introitus vagina, before which the males worshipped; one in the form of an erect penis, before which the females worshipped. When the human race

reached the stage of housebuilding, their houses of worship, in immitation of their ancestors' characteristics, were constructed with an arched doorway on one side and a steeple on the other. The males entered the arch (and bowed their heads or manifested some sign of reverence). The females entered, with the same reverence, under the steeple. Remains of this sacred habit are, in all probability, manifested in the customs of today, where in some places of worship the males enter to and are seated to the left, and the females to the right. (I have made an attempt to temper this discussion to reason in order that a lay reader may grasp the meaning.) The truth in this does not necessarily reflect upon the church of today, nor belittle it, but rather, to my mind, it dignifies it, to know that the church has kept pace with civilization (and as it has given its greatest efforts toward the moral side of civilization, we cannot question that the church has been our greatest factor in the attainment of our high standard of civilization), and has ascended from such a crude and loathsome form of worship to the present wonderful, glorious and soul-satisfying state, is, to my mind, the greatest tribute that could possibly be bestowed upon any one factor that has entered into the uplift of the human race. This represents the moral ascent of the state of affairs. Now we will try to show the immoral effects of some of the ancient and crude habits.

Some of the ancient forms of amusement and entertainments were derived from their attention to the sexual organs. It was the custom of some of the rulers to set aside a day for recreation and amusement, similar to our customs of May Day picnics, when the weather was suitable, warm and pleasant, and other evidences of budding spring were shown. He would make elaborate preparations, set up a huge shaft, the representation of an erect penis, decorate it with flowers, and call together all the virgins from among his tribe, and there upon that occasion dance and sing and march around the huge representation of a penis. To this form of amusement was given the name of "The May Pole," which even today has not entirely lost its popularity upon our May Day festivities. (I think I can see here the origin of some of our modern immodest dances.) These occasions were sacred to these ancient tribes, inasmuch as these virgins upon these occasions sacrificed their virginity to their chief or king.

The instinctive origin of every human attainment teaches us much along this line. There is not a trait, peculiar condition, or attainment in man, but that it has its prototype or analogy among the lower animals. As we have ascended the civilized scale, our limits of attainment and development have widened, and with these other developments the sexual knowledge and development have also extended. And into this scope has crept the feature of commerce, and unquestionably is the greatest factor the moral forces of mankind have to contend with. The sexual organs have been turned into the channels of commerce as has also every other attribute or attainment of man. (The voice, by culture, is sold to the auditors of the grand opera, just as the peanuts are on the streets.)

Evidences of erotomania may be found among the lower animals—the dog, the cow, and others. Did you ever see an old male attempt to assault the young heifer? (This is erotomania.) There at once arises an instinctive spirit among the other animals against such conduct. (This is morality—or the instinctive force in which was conceived our moral laws.) Even the animals possess an intuitive restraint against the violations of moral laws, and respect the age of consent (maturity).

There is expected a great result from the idea that these erotics should be desexualized. In extreme cases it is a satisfactory substitute for decapitation, but for universal use, to eliminate the undesirable, it will never produce any decided impression upon the human race. Whenever *I* or *you* or a committee shall have the authority to pass upon whether you, yours or someone else's shall be desexualized, there will creep in sufficient commercialization to necessitate interception, and the better spirit of man will be called upon to put down the practice. *And we shall by the process of education and development, in the end be saved.*

Dr. Morgan Smith (Little Rock): Dr. Douglass' very excellent paper should be discussed with that seriousness which the subject merits. Levity has no place in the consideration of this subject. The treatment of erotomania is primarily prophylactic—that is, it should be prevented, if possible. Education in sex matters between puberty and matrimony, as suggested by Dr. Lee, is too late to be of any value. Instruction in sex hygiene must begin in the very early and tender years and conducted in a definite and progressive manner. The family physician must qualify himself as a teacher of parents, otherwise parents will not be competent to teach their children. I have thoroughly enjoyed Dr. Douglass' paper.

Dr. Will Cantrell (Greenville, Tex.): In the lower animals the Creator protected against this mania in two natural ways—limiting the rutting season to only a few days in the year, and sealing the vagina throughout the period of gestation, making it not a virtue to repulse the lustful attention from male members, but a nature's protected consequence.

To the race of man, made in His own image, He did not extend these two natural protections, quite the contrary, permitting open rutting season, including the period of pregnancy. In His wisdom He endowed our race with a higher intellect which should at all times place us morally above the lower creatures.

To sum it up, I would say environment, education, proper training, good citizenship, and proper training in sexual matters.

The good Providence has sent us only boys and my most excellent wife strongly advocates a single standard moral code. We decided early and have proven that it is wise to teach our boys to associate with and respect girls; this social life is safest for both girls and boys. An "alley life" for boys is a certain criminal education. We are educating our boys for useful pursuit and making continued effort to keep them fit to associate with the best of the girls of our community. If we succeed, this question will have a practical answer.

Dr. G. H. Moody (San Antonio, Tex.): I wish to thank this association for the privilege of being with you today. This subject is one of so much importance, and so interesting to me, that I cannot refrain from discussing it with just a word. The discussion as well as the paper has been very instructive and interesting. This subject we can talk about and preach about just as long as we want to, and when we get through, we will be just about where we started. I think Dr. Martin, perhaps, struck the keynote when he said, "Let's be honest with ourselves in considering this subject." Someone has spoken of the advisability of abolishing the double standard of morality. That's excellent, and all of us would endorse it, those of us who wish to live the right kind of life, and do the right thing. But, the fact is, we are not going to abolish it; you may just as well accept that right now, because we are placed here in nature as we are, and we are not able to change ourselves.

With reference to these erotomaniacs, we must separate the normal from the abnormal. There are many men who are very strong sexually that are normal; they are more normal than the man who is weak in this respect, in fact. Erotomania, though, in the true sense of the word, is a form of degeneracy, and we must consider it as such. It is a condition not to be moralized out, but to be treated from a scientific medical standpoint.

When it comes to the question of vasectomy to cure this and other troubles, it is very fine; but it has such limited application, as one man who discussed the

paper said, until it is impracticable so far as doing any good is concerned. I wouldn't care to have my boy operated on; you wouldn't care to have yours operated on. It would be all right for the other fellow, but not our own. It applies all the way through all of the neuroses and psychoses, except those which are so grossly abnormal until they have to be operated on. Don't understand that I do not favor it, but it has its limitations in usefulness on that acconut.

Someone has suggested that we will never advance much until we eliminate prostitution. That is very fine, too, and the ministers who advocate it, as well as other moral questions, are to be commended for their moral feelings and all. Prostitution is not going to be eliminated. The world has been interested in that effort for hundreds of years. The old countries have taken it up from every standpoint, and it cannot be eliminated. We have got to accept it, and do the best we can with it along lines of regulation. Its greatest harm, of course, is its spread of venereal diseases, which is its greatest misfortune, aud it would be well if we could eliminate venereal diseases, but we are not going to be able to do that except as we change our methods and educate the pepole. I believe in Texas we are going to limit the amount of venereal diseases because of the active interest the medical profession has taken. It is unfortunate that we have venereal diseases; it is very unfortunate, as one of the doctors said, because it is causing more degeneracy, perhaps, more insanity, than anything else, except heredity, of course.

If we would be a little more definite, though, iu our ways of meeting this condition except moralizing, if we would be willing to recommend to our people prophylaxis, it would accomplish more. The ministers tell us if we use prophylaxis as is beiug used by the armies, as all of you are familiar with, which is very successful, we are simply licensing our boys to go ahead with their indulgence and feel secure as they do it. I am not inclined to look at it that way. I believe we ought to use prophylaxis as thoroughly as we can.

One doctor spoke of the criminal insane. He hit the note pretty well, I think. We ought to have, or need in every state, a criminal insane asylum, aud every man who makes a plea of insanity after he commits a crime, ought to be confined in that asylum for a sufficient number of years that he may overcome that degeneracy, or until he gets a chance to get well.

Dr. Douglass (closing the discussion): Dr. Pettus spoke of erotomania as a form of paranoia. I have never so understood paranoia. He may be correct about that. I intended to look up more thoroughly the meaning of paranoia. but I have never understood that erotomania had anything to do with it. Erotomania is, of course, a pathological sexuality, aud alcohol and other narcotics have a part to play. Euvironment has a great deal to do with it.

The doctor speaks of lack of frankness. I am not surprised that these people lack fraukness. They probably always will. Defectives will not tell of their condition; they are not likely to; but, it is apparent that one does not need to be told much about them. And, he is right iu saying that proper attention should be paid to the physiology of the sexual organs of the young; attention to the clitoris and the fore-skin, and especially the prevention of self-abuse ou the part of both girls and boys. It is common enough. I don't believe that they (erotomaniacs) are insaue. The probability is that it (masturbation) has much to do with the development of eroticism and erotomania.

Dr. Fly says the subject is talked about too much, and a good remedy would be to let it alone. There is something in that.

I think the case that I related thoroughly justifies the paper I have read. The fact that a man, who is obviously not insane, after killing a man, is confined to an asylum, when the superintendent says he is not insane, and is kept there anyhow, what sort of justice keeps a man in an insane asylum who is not insane? Clearly, he should have been turned loose just as soon as the superintendent found he was not insane. It was absolutely unjust to keep him in a hospital for the insane. That is not a place for criminals; it is a place for mental defectives.

We do no good by simply putting our heads under the sand, like an ostrich, in this matter. We might as well talk it out. We might as well deal with it ratioually and intelligently. That is what we have got to do ultimately.

Dr. Dorr wants to know when erotomania ends and insanity begins. I don't know. It will take some of these alienists to tell us where insanity begins and where sauity ends. There is no sharp differentiation, no fine dividiug line.

Dr. Dorr: I didn't think so. I just wondered if you knew.

Dr. Douglass: I don't know. There is a fine distinction. It is a difficult question to determine, when a man is insane and when he is not. I understand that in every community there are paranoiacs. There are many iudividuals who are not perfect mentally. The ouly way to determine whether a person is sane or insane is by a comparison with the average normal. There is no absolute standpoint of sanity or insanity. Obviously, if a man is insane enough that his insanity makes him commit a crime, he should be kept in a hospital for the insane for life; he should not be turned loose.

Dr. Mitchell, of New Mexico, said the trouble should be nipped in the bud, and spoke of segregation and sterilization of the unfit. Those things are coming, of course. They are bound to come. We have got to prevent the procreation of the unfit, and certainly we are going to have segregation and sterilization. They simply cannot be allowed to go on filling the world. They marry freely; they procreate abundantly. There is no limit, no restriction to them. Obviously, this is to the great disadvantage of mankind, and in some way it must be controlled. He is right in saying that the child of bad heredity should be closely safeguarded.

Dr. Gregory says that these people are actually insane. Perhaps they are, but after they go in the hospital they are decided not to be insane; they show no other symptoms of insanity. I have often wondered why it is that in Arkansas we have such a great percentage of insane, and, if we put all these erotomaniacs in the hospital for the insaue, I don't know who would be out. (Laughter.) I might be there myself! Over in Kansas I understand they have eighty counties without an insane person. I wondered how to account for that. The only way I have been able to explain it at all is that I suppose, perhaps, most of the population are somewhat that way, and they can't put them all in! (Laughter.)

Dr. Gregory says the masses must rise up and demand segregation and sterilization of the unfit, and they should be prevented from marrying. He is right in his saying that the syphilitic should not be allowed to disseminate the disease. Syphilis is a tremendously common disease. It invades every walk of life. It includes the insane. The ravages of that awful disease are terrible. You meet with it in the most surprising circumstances; people whom you know to be perfectly moral and upright; and it is an awful thing to be afflicted in that way. Our measures for preventing this condition have been insufficient; something more must be done. I think that it is an absolute impossibility to prevent syphilis and gonorrhea without also abolishing prostitution.

Our friend (Dr. Moody) from San Antonio says it can't be done. He says you can't change ourselves. He sounds like a fatalist to me. He says sexually strong men are normal, but that erotomania is abnormal. Vasectomy, he says, is fine, but premature; we can't eliminate, but must accept them; can't eliminate venereal diseases. The only thing proposed is prophylaxis. It sounds like we can't do anything; that we ought to supinely submit to this monstrous condition of affairs. I don't think so. There is nothing that ought to be done that cannot be done. We can find a way. The only thing that is necessary is for us to determine it shall be done. We can eliminate prostitution, whenever we make up our minds to do it. We can find a way to do it. Erotomania is responsible for the prostitute. It wouldn't be impossible for men to adopt the same moral standard that they require for their wives and daughters. No man, even a man with erotomania, is willing to furnish his daughters or wife. You can't expect anybody else to do it. But, somebody has got to furnish them. It is absolutely unjust. Dr. Gregory, I think, said that the double standard is unfair. Of course it is. It is outrageously unjust for men to require more of women than they require of themselves. There is no defense for it. We say that men have strong passions; that they are built that way. You can't excuse a man who is supposed to be intelligent, who has reason enthroned, for following the same instincts that the bull in the field follows. He is given a mind to control himself with. And, it is absurd to pretend that a man cannot be continent and be healthy. Illicit intercourse is not a sign of good health. It is injurious to good health. It interferes with rational processes, with the right kind of thinking. Such mode of life is an insult to the good woman whom he marries, and from whom he expects far better things, and from whom he would not stand any such life at all.

Dr. Lee says there is no need for alarm, that the cure is by education. I agree with that position. And, as I said in the paper, the tales of Boccaccio were certainly much more erotic than anything we have now, and there was a time when erotoeism was much more rampant; but in this age we know better, we are aware of our condition more or less, and we are becoming more aware. I read this paper that we might be more so; that we might be awake to the situation.

Dr. Lee's remarks remind us of a lecture that we heard some thirty years ago up in St. Louis by Prof. Otto A. Wall, on Phallic Worship. I remember the tremendous shock it gave me when I heard it, the cold cynicism of that man in presenting those things in that way. It was a tremendous shock to the sensibilities of anybody, and I could hardly listen to the lecture as he traced the origin of all religious things to sex worship. Did you hear that, Dr. Lee?

Dr. Lee: I read it. I wasn't old enough to hear it.

Dr. Douglass: I especially appreciate the remarks of Dr. Morgan Smith on the paper. This subject is one of tremendously serious importance, and education is the right solution to it, but educational processes in this direction are tremendously slow. We are not doing enough about it; more should be done. We are here in the beginning of the twentieth century, right in the beginning of a reform that should have been accomplished long ago. The thing has gone on too long. The men have persisted in a moral standard that is wrong, for too long a time. It is time for reform; it should have been accomplished before.

Educational processes are slow. The truth is that all of our educational processes need transformation. There has never been a time when there was such earnest and sincere discussion on the part of educators with regard to the curriculum of schools, and we now realize that the young should be instructed early in sexual affairs. It must be done, and, as I stated in the paper, intelligence will find a way to do it properly and wisely, and in a way that will not injure the young. I venture the assertion that there is hardly a person here today whose instruction in sex matters did not come from the wrong source. Dr. Smith is right in saying that this instruction should be given early. It is not a panacea; but it will be a great help. He approves segregation and sterilization of the unfit.

I suppose I have said all that ought to be said on the subject. The cordial reception you have given my paper, and the earnest discussion, indicates to my mind a full justification for presenting it, and I thank you very warmly. (Applause.)

Dr. C. W. Garrison (Little Rock): It is difficult to arrive at a single standard of morals for men and women, because of anatomical differences in structure and embryologic differences that take place in the generative organs of each. The only irrefutable evidence of copulation is the birth. Fear holds many women in the paths of virtue. Is it not only the unmarried girl who has been so unfortunate as to conceive and bear a child that is banished from so-called "good society?" Do we not see a great many young women sow their "wild oats," escape the evidence of their gross immorality, marry, settle down and become respectable wives and mothers in a community? This, it seems to me, will ever prevent the establishment of a single standard absolutely, certainly until custom changes our present code of morals.

As to teaching sex hygiene: on the floor of the Southern Medical Association in Lexington, November, 1913, a doctor who had been in charge of a colony of 1,600 Aborigines Indians made this report: That during the time he had personally supervised these Indians and associated with them daily, that these native people had a standard of morals all their own; that it was customary to shave the head of any person guilty of immorality; that during this period only one person, a woman, had suffered her head to be shaved; that these people begin to educate their offspring from birth as to sexual relation, the normal relation of the man to the woman, what was really meant by motherhood and fatherhood; and during his sixteen years of constant supervision there had not been a single case of venereal disease in these 1,600 native Indians.

THE HEALTHY CITIZEN.*

By J. T. Clegg, M. D.,
Siloam Springs,

Member of the State Board of Health.

The social problems that confront society at all times are crime, poverty and preventable disease. Crime and poverty are so closely linked with the latter that they make the subject of preventable disease paramount. Therefore, disease contributes to poverty and poverty to crime. Interest in the matter of preventable disease or the healthy citizen is not or should not be limited to the medical profession; it is the duty of everyone, so far as is in his power, to keep well, and to keep his

*Read in the Section on Public Health, Fortieth Annual Session of the Arkansas Medical Society, Texarkana, May 2, 3, 4, 1916.

neighbor well. In the cause of public health we are truly our brothers' keeper. The question, too, of healthy citizenship should not be discussed from a sentimental point of view, but considered purely as one of public as well as private economy, and to figure on the value of a healthy citizen in dollars and cents as a wage-earner and contributor to the wealth of his community. By computing the cost of illness we may estimate the value of health, not noting the loss of life from preventable disease, because when a man dies his account is closed in the book of health, whatever may be the color of his ledger balance. In computing the cost of illness, take for example an average business man or mechanic whose earnings are about four dollars per day, sick with typhoid fever:

Item 1.	Hospital fees one week	$15.00
Item 2.	Doctor's fees one week	15.00
Item 3.	Drugs and medicines one week	2.50
Item 4.	Laundry one week	1.50
Item 5.	Loss of wages one week	20.00
Total		$54.00

The average duration of an attack of typhoid fever is six weeks, making a total of $324.00 it costs to enjoy the luxury of one spell of typhoid fever. Put it down as conservative that the cost of being sick will average fifty dollars a week. Just how many weeks of illness caused by preventable disease occur in the state during a year, I have no means of knowing. I do know that it is a calamity to have typhoid fever; that it is a crime to have malaria; that there should be fewer cases of tuberculosis; that we have too many cases of dysentery or flux; that entirely too many babies die of infantile diarrheas or summer complaint. I do know that all are just as preventable as epidemic cholera or yellow fever, neither of which will ever again be to dread. From all of these conditions known to be preventable, existing without any effort being made to prevent them, would cause, at a low estimate, ten thousand weeks of illness occurring in the state, costing in aggregate a half million dollars that should be added to the wealth of healthy citizenship every year.

All doctors know the uncertainty of curing the sick after they get sick. The science of therapeutics is but little better than guesswork, hence the different so-called schools of medicine, each treating disease according to its own theory. There are but few, if any, specific remedies for the cure of disease; so, surely, if you will pardon an old saying, "An ounce of prevention is worth a pound of cure." The possibility of preventing disease is no myth. Sanitary science not only gives us a hope, but an actual power to prevent sickness in nearly all its forms. Sanitation is not guesswork, but a demonstrated fact which has reversed conditions of a few years ago, and has made the city healthier than the country, and has turned deadly fens and marshes into health resorts. See Cuba and the canal zone. The phenomena of sanitation are just as certain, constant and fixed as are the ordinary phenomena of physics. Many diseases can be prevented with as much certainty as water can be made to boil or metal to melt. In spite, however, of its benefit in the creation of a healthier citizenship, public sanitation has to fight for existence. Opposition to public health regulation comes from various sources. First, there is still alive among the people the result of the teaching of centuries, a belief in demons and the demoniacal cause of disease, therefore a fatalistic submission to the results of sickness or disease, whatever they may be.

Secondly, there is opposition from the innocently ignorant, who are skeptical of the benefits of sanitary regulations, who honestly believe that money is wasted when spent for public sanitation. There is hope for this class, because observation will teach them better.

Third, the most wicked opposition to sanitary laws and health regulations is that emanating from the patent medicine people and the so-called Association for Medical Freedom. They control some of the newspapers and a few of the most popular and widely read magazines, that ridicule any suggestion relating to public health, and fight most bitterly all pure food and drug legislation. These people and their newspaper accomplices are but little, if any, better than paid assassins.

We would like to correct the delusion, if anyone entertains such a delusion, that it is from an altruistic or charitable sentiment or feeling, that medical men advocate the enforcing of sanitary science or regulations, or the creation of a healthy citizenship. No one comprehends quite so well as a doctor the worth of a well man, and the worthlessness of a sick one. Doctors differ mentally and morally but very little from other folks. People who are a long time sick give a doctor lots of work and worry, and, as a rule, but little money; and money looks good to most members of the profession. I know what I am talking about when I am discussing the advantages of a healthy

location over a sickly one, having practiced medicine in both. Fancy a comparison of two average farmer families of five each, A and B. A lives in a malarial locality; the land he cultivates is equally, if not more, fertile than that of B's. In July or August, A contracts malaria; twelve or fourteen days later so do his wife and children. The older children have several convulsive attacks during the autumn. The baby, on account of the illness and lack of care on the part of its mother, gets indigestion and so-called summer complaint. A's doctor has been in almost daily and nightly attendance on A's family. But A has gotten in debt, he owes his merchant, perhaps, on a mortgage the most of his year's work. A's doctor must settle on a long discount or wait another year uncertain of his fees. The family of B is healthy. B is able to work; his crop is good; he does not owe for it; he is able to gather it and market it. He pays any debts he may owe, and keeps a balance to his credit in the bank. B's oldest boy, in a spirit of adventure common to a boy who is never sick, gets a broken arm. B's doctor sets it and, when the arm is well, gets B's check for $25.00. B's wife needs some surgical care. B's doctor gives it, receives another check for his services. B's doctor has lost no sleep with B's family, has gotten two nice little fees, and all is satisfactory. It is an assumption without argument that a healthy citizen is yet of more worth to all other avenues of business or state.

Viewing the question of good health from a cold-blooded money standpoint without altruistic or humane sentiment, a state cannot afford to allow its citizens to be sick of preventable disease, whether that disease is bodily or mental, resulting in a feeble body or feeble mind. If preventable disease was eliminated and the state populated with a healthy citizenship, Arkansas would surely be a garden through which rivers flow. The laborer, the mechanic, the salesman, in fact the sick man in any calling of life, is of no value to himself or the state. Then why not work to keep well and to keep our neighbor well, and enjoy the blessings of healthy citizenship?

Recall the Aesculapian oath and reconsecrate the best that is in you to the uplift of the profession and the progressive betterment of your fellow-man.

It is "personal work" that we need, and it is "personal work" only on which we can rely for success in this certain rejuvenation. Let every secretary and every president of every county society make this solemn resolution: "I will go to work, and keep working, for the good of my society, my fellow-man, and for humanity, until I have every deserving man in my county within the bounds of my society."

Get in touch with every deserving man in your county immediately. Impress upon him that *he needs* the benefits association confers, and that *we need* his presence and influence.

A chain is just as strong as its weakest link. The State Society is made up of the county societies. Every county society is a link in the chain; therefore, the strength of the State Society depends on the strength of the units composing it. Put vim and vigor into them. To keep alive interest in the State Society it is essential that the interest of every member be kept alive in his county society. The monthly meetings must be made worth while; there must be preparation. Members who will work and not shirk should be assigned to prepare papers for the next meeting. A Program Committee should be appointed in every county society, and if it does not prepare acceptable programs it should be superseded by a committee that will do so.—Extract from the address of President J. C. Wallis.

Recently Dr. Stevens, secretary of the Pennsylvania State Medical Society sent me an exchange copy of The Journal of the Arkansas Medical Society. It is a splendid copy and I wish to compliment you upon its excellency. The Journal has its "working clothes on," which argues well for the men down South. Under separate cover I mail you a copy of a monthly issued by the Bucks County (Pa.) Medical Society. We have a live bunch of men up this way; they are right on the job.

Very kindly yours,

ANTHONY F. MYERS, *See'y.*

Blooming Glen, Pa.

Victor G. Vecki, in his praiseworthy book on Sexual Impotence, says that in Bosnia the moon flower is so highly prized as anaphrodisiac that women "put the blossoms among the linen of husbands about to go on a journey." If it is effective, and if the husbands really return home chaste, why should not the Society of Moral and Sanitary Prophylaxis adopt this moon flower as its official plant?—Medical Review of Reviews.

THE JOURNAL
OF THE
Arkansas Medical Society

Owned and controlled by the Arkansas Medical Society and published under the direction of the Council.

DR. WILLIAM R. BATHURST, Editor.

PUBLISHED MONTHLY. Price, $1.00 a Year in Advance.
Single Copies, 25 Cents.

Entered as second-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under Act of Congress of March 3, 1879.

All communications to this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

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The Journal of the Arkansas Medical Society,
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Little Rock, Ark.

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Editorials.

A GREAT LOSS TO THE PROFESSION.

The death of Dr. Rudolph H. Von Ezdorf at Lincolnton, N. C., on Friday, September 8, is a loss to the medical profession in the South which will be keenly felt. Dr. Von Ezdorf has done notable work in experimenting in the treatment of yellow fever and malarial fever. He was one of the physicians from the U. S. Marine Hospital at New Orleans who came to Arkansas and installed the experimental work for the elimination of malarial fever at two points in the state. At the age of forty-three years he had attained wide fame for his services to humanity. Pity, indeed, it is that a life so full of promise should be prematurely curtailed. His work will live after him—he has not lived in vain.

GET BUSY NOW.

Every member of the Arkansas Medical Society must be vitally interested in the work of the State Board of Health, and, being interested, he should get busy with the members of the House and Senate of his district. There must be adequate appropriations for the State Board of Health and for the Folsom Clinic of the new State Charity Hospital. Past experiences have demonstrated that it is extremely unwise to wait till the legislature is in session before trying to impress the lawmakers with the importance of public health measures. They are not impressed now, nor will they be unless the matter is brought to their attention before the session opens. After it opens they will be altogether too busy with the bills of local importance to turn aside for trifling matters which affect the lives and health of the whole state.

Years ago Memphis was afflicted with yellow fever two years in succession—in 1878 and 1879. The scourge slew thousands and cost in trade many millions. It set the city back for years. But in the end it was a blessing, if only for the reason that it awakened the city to the need of sanitation and general health legislation. New York is now battling with a visitation of infantile paralysis; but New York is prepared as far as funds go, and has an adequately equipped state and city health board. It has been very difficult to arouse public opinion to the proper pitch in Arkansas. When appropriations are asked for, the feeling obtains that a few doctors are seeking soft jobs. The real self-saerifice of the profession in seeking the good of the community is not apparent, and if it did occur to them, most likely the discovery would not carry conviction with it.

The time to get busy is right now. Work on the new and old members and impress upon them the importance of this great work. Get your local editors interested. They will be glad to publish anything you furnish them and will give you editorial support also. If the members will do this throughout the state before the legislature meets, then it will not be such "hard sledding" to pass such bills as should be passed in the interest of the general health. The best advertisement a state can have is a low mortality rate and freedom from contagious diseases.

THE FUTILITY OF HUMAN EFFORT.

There must arise to thoughtful men and women, from time to time, the conviction of the futility of all human effort. The physician in his professional capacity is not immune from this thought. To illustrate, there is the epidemic of infantile paralysis in New York. To date, medical science has been powerless to even check it. When a day or two days show a decrease in new cases, any claim that it is due to the work of the doctors is nullified by the lull being followed by an in-

crease, and the indications are that it will permanently decline only when it has run its course. Meanwhile, medical skill has made little, if any, headway in positively learning whence it comes, how it is spread, or how to prevent its spread.

Medical science had flattered itself that the diminution of the death rate in children is due to the intelligent campaign of education which has been in progress for a score of years and is now bearing fruit. This is true, but we have just awakened to the fact that as the death rate among children has decreased, the mortality ratio has increased among the people over forty years; so the question arises whether much more is being accomplished than in the attempt to lengthen a sheet by cutting off at one end and sewing the piece on the other. And now comes this epidemic of poliomyelitis to so increase the infantile death rate as to probably return the average, for a time, to what it was before it declined. It is these facts that must cause the scientific man, if at all pessimistic—as we all are at times—to ask the question, "What's the use?" We have made diphtheria less fatal, but the mortality from it is still staggering. We have been able to do practically nothing toward really checking the ravages of the white plague, or of cancer and other mortal diseases which have been the subject of painstaking study for generations.

The plan of nature seems to be based on endless attack and defense. Every animal, from man downward, lives on the death of the living. As Hamlet puts it, "Your worm is your only emperor for diet; we fat all else to fat us and we fat ourselves for maggots." A century or two ago De Morgan wrote the famous couplet:

"Great fleas have little fleas upon their backs to bite 'em;
And little fleas have lesser fleas and so ad infinitum,
And the great fleas in turn have greater fleas to go on;
While these again have greater still, and greater still, and so on."

It is not for man to comprehend the infinite nor the designs of nature. Apparently they are based on ineffable cruelty. We are taught that everything in nature has its place and use. We perhaps do not really believe this, because, if we did, we should hesitate to kill even in self-protection. Rather it seems that conditions favorable to life produce various types and each individual promptly begins the struggle for existence at the expense of its prey, the fittest surviving. The right to life is perhaps as real to the biting flea feasting on the blood of its victim as it is to man as he slays to sustain life. Shakespeare, centuries before the discovery of the germ theory, puts into the philosophy of Hamlet this thought: After he kills Polonius he is asked by his father, "Where is Polonius?"

And the answer is, "At supper, my lord, not where he eats, but where he is eaten. A certain body of politic worms is e'en now at him."

There is the whole scheme of life. But before the worm gets in his work comes the deadly germ, first to the feast and providing the later feast to the maggot. Physical strength is nothing; the smallest poisonous insect may slay an elephant. The invisible germ thrives on deaths of the highest type of useful men and women; and man's efforts remain futile. All he can be sure of is of his own insignificance.

Perhaps there is hidden humor in the scheme of life. Consider the works of man. He has builded great cities like Babylon, Tyre, Sidon, Herculaneum, Pompeii, ancient Rome, and they have disappeared from the face of the earth or exist as ruins, mere mementos of past glories. He has founded empires and they have gone. He has conquered races and been in turn conquered. And of all man's work that has endured through the ages there remains only the pyramids and the Sphynx —and they are utterly useless things except for Cook's tourists to stand and gape at. When one considers things mundane from this viewpoint, well may he echo the words of the poet: "Oh, why should the spirit of mortal be proud?"

Abstracts.

COLON OPERATIONS.

A. J. Oehsner, Chicago (Journal A. M. A., August 12, 1916), mentions the danger from obstruction to the passage of gas following colon operations and describes the methods which have been devised to avoid it. The descriptions require the illustrations accompanying them to make them perfectly clear in some regards, hence the article does not readily lend itself to abstracting, but will be useful in its suggestions to operators in this line.

INTESTINAL OBSTRUCTION.

J. Y. Brown, St. Louis (Journal A. M. A., August 12, 1916), says that in acute intestinal obstruction with stercoraceous vomiting and profound toxemia the question that confronts the surgeon is how he can quickly and safely relieve the patient of the immediate cause of his illness, and, in doing this, take fully into consideration the possibility of subsequent radical work. In most cases after the acute condition has been relieved, they will be found inoperable from a radical standpoint, but in a few cases when the patient reacts from the acute condition, radical work can be done. In a series of six cases of this type he has been able, by means of an ileal anus on the right side and exclusion of the large bowel, to relieve the patients without mortality. The right side anus is recommended for the following reasons: 1. It can be rapidly made. 2. It admits of immediate and proper drainage above the obstruction. 3. It excludes completely the large bowel, and he has found that as soon as the fecal current is turned away from it, partial relief of the obstruction in the excluded bowel follows in a very short time. Irrigations through a tube passed through the ileoccecal valve and the use of the rectal tube will cause complete evacuation of the contents of the large bowel. 4. Should it be necessary to re-establish the continuity of the bowel, it can be done with the greatest possible ease, while if a left side colostomy had been done the difficulties of restoring bowel continuity would be much greater. The possessor of an artificial anus is not to be envied, but it is astonishing how little discomfort results from the anus on the right side. There is comparatively no odor to the discharge, and with a properly adjusted receptacle the patient can live in comparative comfort. The technic of the operation is as follows: Before giving the anesthetic, the stomach is washed until the water comes back clear. Under ether or gas, incision is made through the outer border of the right rectus muscle, the cecum is located and the small bowel is pulled up, clamped and cut across two or three inches above the ileoccecal valve. One-half of a Murphy button is put in a good-sized rubber tube, which is inserted and purse-stringed in the proximal intestine. A tube of the same size is next inserted into the distal ileum and through the ileoccecal valve. This is held in position by a purse-string. Both the proximal and distal ends of the intestine are brought out and fixed at the lower angle of the incision. The wound is closed in the usual manner. The protruding bowel and tubes are carefully surrounded by gauze and the stomach is again washed out before the patient leaves the table. The tube through the ileoccecal valve gives exit to the gas contained in the large bowel, and the tube in the proximal ileum drains the small bowel. If subsequent radical work becomes necessary this can be done in a manner to meet conditions. If the original obstruction is intestinal in its pathology, this can be removed and the bowel continuity restored by a lateral anastomosis or end-to-end anastomosis of ileum to cecum. If resection of the colon becomes necessary, the fact that the large bowel has been excluded enables the operator to work on the left side under ideal conditions.

Personals and News Items.

Dr. O. A. Carruth of Little Rock visited in Warren this month.

Dr. and Mrs. Robert Caldwell of Little Rock have returned from Colorado.

Dr. B. D. Luck of Pine Bluff has returned from New York.

Dr. E. O. Day of Little Rock has returned from the East.

Dr. A. L. Carmichael of Little Rock has returned from a visit to northwest Arkansas.

Dr. and Mrs. C. R. Shinault and daughter, Miss Josephine, of Little Rock, have returned from Horn Springs, Tenn.

Dr. and Mrs. W. A. Dashiel of Little Rock have returned from the East. Dr. Dashiel's office is located in the State Bank Building.

The eleventh annual meeting of the Medical Association of the Southwest will be held October 2, 3, 4, at Fort Smith.

Our advertising pages are good reading.

Dr. Carle Bentley of Little Rock has returned from Chicago.

Dr. C. E. Robinson of Little Rock has moved from the Bankers Trust Building to the State Bank Building.

Dr. J. P. Runyan announces that another story will soon be added to St. Luke's Hospital, Little Rock.

Dr. and Mrs. H. H. Niehuss of El Dorado and their son and daughter visited in Little Rock this month.

Dr. J. R. Wayne of Little Rock has returned from a three weeks' visit to the Mayo Clinics, Rochester, Minn.

Drs. J. P. Runyan and H. H. Kirby of Little Rock have formed partnership. Their offices will be located in the State Bank Building.

The secretaries of the County and District Medical Societies are reminded that The Journal will gladly publish reports of their meetings.

Dr. J. Vincent Falisi of Little Rock, first lieutenant of the Medical Reserve Corps, who has been in the Army and Navy General Hospital at Hot Springs, has been relieved of active duty and has returned home and opened his office in the State Bank Building.

During the past month the following physicians visited in Little Rock: Dr. W. G. Hodges of Malvern, Dr. F. T. Murphy of Brinkley, Dr. George E. Tucker of Roland, Dr. B. L. Hill of Stuttgart, Dr. J. L. Plumlee of Fort Smith, Dr. Wm. C. Chapman, surgeon, Texas and Pacific railroad, of Marshall, Tex., and Dr. L. E. Love of Dardanelle.

Dr. John B. Murphy of Chicago, fifty-nine years old, died August 11, at Mackinac Island, Mich., of myocarditis—in other words, so-called arteriosclerosis. For eighteen years he was attending surgeon of the Cook County Hospital and later advisory surgeon. He was chief surgeon of Mercy Hospital, attending surgeon at St. Luke's, St. Joseph's and Columbus Hospitals, and consulting surgeon of the Hospital for Crippled Children. Dr. Murphy was a constant contributor to literature on bone surgery and the surgical diseases of the abdominal cavity.

THE ANTHRAX PLAGUE.

Many cattle and horses have recently died in Arkansas and Monroe Counties as a result of anthrax. The disease is very contagious and livestock die very soon after the attack.

At Stuttgart a drove of sixty-five mules were infected with the disease and all but twenty-five of them died before they could treat them with anthrax antitoxin; however, the medicine proves not only that it will prevent the disease, but it will effect a cure after infection. The twenty-five mules that were treated are now practically well. This medicine not only saves animals, but it will cure human individuals. A number of cattle died near Holly Grove, Ark., and the hands of three men were infected because of the handling of the cattle. The doctors despaired of their lives, save Dr. Syler of Holly Grove, who procured antitoxin serum with the result that the men's lives were saved. Dr. Syler deserves great credit for his untiring energy in the nursing and treating of the patients almost night and day.

The one peculiarity about the disease is that while the men are able to be around, nevertheless the infected places have never entirely healed. The tissue is so badly torn down that it will take a long while for nature to restore it.

The result of the anthrax treatment is that it has saved human life and livestock to the value of many thousands of dollars.

HEALTH NEWS.

What profiteth a man that he gain the whole world yet lose his health?

Naturalists say that long ago the prehistoric waters were infested with a species of enormous shark which finally became extinct by reason of the workings of its voracious appetite. Thus Nature eliminates the overfed.

The desire for ease of life and plentiful diet is universal and is the great stimulus of man and animals alike. When man becomes greedy and takes more ease and food and drink than is his share, Nature discards him.

In the race for power and place, for ease of circumstance and relief from the stimulus of hunger, the modern man is apt to forget that unless he is careful of his body he will soon be made to suffer for the infraction of Nature's inexorable physical law. With the loss in body tone comes an equal loss in mental acquity, and the brain, which for a time was able to operate despite the complaints of an overfed, underexercised, self-poisoned body, stops working.

Statisticians have discovered that the mortality rate of persons in the United States over forty-five years of age is increasing. The strenuous life of today is not alone responsible for this. Lack of health-giving exercise, superfluity of diet, lack of restoring sleep, overstimulation, the high pressure of the race for power, wealth and position, plus physical

neglect—these bring early decay. The goal is reached—wealth is amassed—honor, position and power are just being grasped when the apple of accomplishment turns to the ashes of dissolution. The brilliant mind becomes clouded, the steady hand is no longer accurate, the eye which once gazed fearlessly on the whole world is dimmed, and it is not long before the final break-up occurs. All of this was entirely preventable.

Other things being equal, it is the man who leads the well-balanced life who lasts the longest, whose work to the end is uniformly the best; he who neither overworks nor overplays, neither overeats, overdrinks nor oversleeps; he who maintains a standard of simple, healthy diet in moderation, who offsets mental work with physical recreation, who is as honest with his own body as he is with his own business. When success comes to such an one his physical and mental condition is such that he can enjoy in peace of mind and contentment of body the fruits of his labors.

The regulations of U. S. Public Health Service state: "It is the duty of officers to maintain their physical as well as their professional fitness. To this end they shall be allowed time for recreation and study whenever their official duties will permit." If the government regards it as essential that its sanitary experts shall be safeguarded in this way, is it not equally important to every citizen that he similarly maintain a high standard of physical integrity?

New and Nonofficial Remedies.

Fibrin Ferments and Thrombolastic Substances (Kephalin).—The clotting of blood has been shown to be due to the action of the fibrin ferment on the fibrinogen of the blood. The fibrin ferment (thrombin) exists in the blood in the form of prothrombin which is converted into thrombin by the action of calcium and thromboplastic substance (thromboplastin). Kephalin, prepared from the brain, has the properties of thromboplastin. Preparations containing thromboplastin are said to be useful, when applied locally, in the treatment of hemorrhages, especially hemorrhages from oozing surfaces, scar tissue and nosebleeds. The intravenous use of thromboplastin in certain conditions has also been proposed.

Brain Lipoid—Impure Kephalin.—This is an ether extract of the brain of the ox, or other mammal, prepared according to the method of Howell and Hisehfelder. It has the properties of thromboplastic substance described above. It may be applied direct to the tissues or on sponges or pledgets, or it may be used in the form of an emulsion with sodium chlorid solution.

Solution Brain Extract — Solution Thromboplastin (Hess).—An extract of ox brain in physiologic salt solution prepared by the method of Hess. It has the properties of thromboplastic substances described above. The solution may be applied directly to, or sprayed on the tissues or by means of a sponge or tampon.

Galactenzyme Tablets.—Tablets containing a practically pure culture of bacillus bulgaricus. For administration in intestinal fermentative diseases. Put up in bottles containing 100 tablets each and bearing an expiration date. The Abbott Laboratories, Chicago.

Galactenzyme Bouillon.—A pure culture in vials of bacillus bulgaricus, each vial containing about 6 c.c. Used internally for intestinal fermentative disorders and topically in nasal, aural, throat, urethral and other affections when the use of such a culture is indicated. Put up in packages of 12 vials each. The Abbott Laboratories, Chicago.

Ampoules Mercuric Salicylate—Squibb, 0.065.—Each ampoule contains 0.065 gm. mercuric salicylate, N. N. R., in 1 c.c. of sterile suspension. E. R. Squibb & Sons, New York.

Ampoules Quinin Dihydrochlorid—Squibb, 1 Gm.—Each ampoule contains 1 gm. quinin dihydrochlorid, N. N. R., in 2 c.c. of sterile solution. E. R. Squibb & Sons, New York.

Ampoules Quinin Dihydrochlorid——Squibb, 0.5 Gm.—Each ampoule contains 0.5 gm. quinin dihydrochlorid, N. N. R., in 2 c.c. of sterile solution. E. R. Squibb & Sons, New York.

Ampoules Quinin Dihydrochlorid—Squibb, 0.25 Gm.—Each ampoule contains 0.25 gm. quinin dihydrochlorid, N. N. R., in 2 c.c. of sterile solution. E. R. Squibb & Sons, New York.

Ampoules Quinin and Urea Hydrochlorid—Squibb, 1 Gm.—Each ampoule contains 1 gm. quinin and urea hydrochlorid, N. N. R., in 2 c.c. of sterile solution. E. R. Squibb & Sons, New York.

Ampoules Quinin and Urea Hydrochlorid—Squibb, 0.5 Gm.—Each ampoule contains 0.5 gm. quinin and urea hydrochlorid, N. N. R., in 2 c.c. of sterile solution. E. R. Squibb & Sons, New York.

Ampoules Quinin and Urea Hydrochlorid—Squibb, 0.25 Gm.—Each ampoule contains 0.25 gm. quinin and urea hydrochlorid, N. N. R., in 2 c.c. of sterile solution. E. R. Squibb & Sons, New York.

Ampoules Quinin and Urea Hydrochlorid—Squibb, 1 Per Cent.—Each ampoule contains 5 c.c. of a sterile 1 per cent solution of quinin and hydrochlorid, N. N. R. E. R. Squibb & Sons, New York.

Ampoules Sodium Cacodylate — Squibb, 0.13 Gm.—Each ampule contains 0.13 gm. sodium cacodylate, N. N. R. E. R. Squibb & Sons, New York.

Ampoules Sodium Cacodylate — Squibb, 0.05 Gm.—Each ampoule contains 0.05 gm. sodium cacodylate, N. N. R. E. R. Squibb & Sons, New York (Journal A. M. A., August 5, 1916, p. 437).

Arbutin — Abbott. — A nonproprietary brand complying with the standards for arbutin N. N. R. The Abbott Laboratories, Chicago (Journal A. M. A., August 19, 1916, p. 586).

Ampoules Mercury Iodid (Red) 1 Per Cent in Oil—Squibb.—Each ampoule contains 1 c.c. of a solution of red mercuric iodid and anesthesian, each 0.01 gm., in a neutral fatty oil. E. R. Squibb & Sons, New York (Journal A. M. A., August 19, 1916, p. 586).

Propaganda for Reform.

Chemotherapeutic Treatment of Tuberculosis.—In the August issue of The Journal of Experimental Medicine, Koga, Otani and Takano report on a new treatment of tuberculosis and leprosy. Koga reports that the treatment of animals inoculated with a preparation of copper and potassium cyanide produces healing changes in tuberculous lesions. He also reports on the treatment of sixty-three cases and thinks that his preparation, which he calls "cyanocuprol," greatly improves or cures pulmonary tuberculosis in the first or second stages and even is beneficial in the third stage. Otani also gives a favorable clinical report of tuberculous cases. Takano treated cases of leprosy with "cyanocuprol" with what appears to be beneficial effects. The Japanese investigators give no clear statement in regard to the composition of the copper-cyanide preparation which they used (Journal A. M. A., August 5, 1916, p. 443).

Tartar Emetic and Sodium Bicarbonate Incompatible.—The A. M. A. Chemical Laboratory reports that when an aqueous solution of tartar emetic is added to a solution of sodium bicarbonate a clear solution results at first, but that on standing a precipitate of antimony hydroxide is formed (Journal A. M. A., August 5, 1916, p. 462).

Ambrine.—An article, "War Letters of an American Woman," in the August 2 issue of "Outlook," contains a glowing account of the use of "ambrine" in the treatment of burns by a Dr. Barthe de Sandfort, Hospital St. Nicholas, Paris. Ambrine is a proprietary preparation which has been on the French market for years. It is a secret nostrum in that the proportions of the ingredients—"wax, paraffin and resin"—are not given. There is nothing original in an application of melted resin, beeswax and paraffin, although the correspondent of "The Outlook" seems to have been carried away with the idea that it is one of the great miracles of the day (Journal A. M. A., August 12, 1916, p. 535).

Sodium Sulphate as an Antidote to Phenol Poisoning.—Sodium sulphate in strong solution is one of the best known antidotes for phenol poisoning. At one time it was erroneously thought that the antidotal effect was due to the formation of sodium phenolsulphonate. It has been suggested that whatever action sodium sulphate has as an antidote for phenol may be due to some hindrance to absorption, and possibly also to added purgation (Journal A. M. A., August 12, 1916, p. 535).

Aspirin.—The patent on aspirin will expire next year. The Bayer Company, the American agents, view with disfavor the prospect of losing the right to the sole manufacture of acetylsalicylic acid. This may explain the campaign of publicity which the Bayer Company has inaugurated in the lay press, in which the public is urged to buy the Bayer brand of acetylsalicylic acid (aspirin) only. There can be no better time than the present for the medical profession to substitute for the nondescriptive name "aspirin" the descriptive and correct name acetylsalicylic acid (Journal A. M. A., August 12, 1916, p. 515).

A Study of "Uterine" Drugs.—Dr. J. D. Pilcher, W. R. Delzell and G. E. Burman, working in the Pharmacologic Laboratory of

the University of Nebraska Medical School, have studied the action on the excised guinea pig uterus of a number of drugs which are constituents of proprietary and "patent" "female" remedies, drugs for the value of which there is little evidence and which would have fallen into disuse but for their exploitation. The following drugs lessened the amplitude of the contractions of the uterine strips, or in stronger solutions caused a complete cessation: Unicorn root, pulsatilla, Jamaica dogwood and figwort. Somewhat less active were valerian and lady's slipper. The drugs having very weak actions were wild yam, life root and skull cap. Blue cohosh was most active and put uterine strips in a state of tonic contraction or tetanus. The following drugs were quite inactive: Black haw, cramp bark, squaw vine, chestnut bark, false unicorn, passion flower, blessed thistle, St. Mary's thistle and motherwort. The authors are confident that the actions observed would also be produced in the intact human uterus, provided the drug reached the uterus in a similar concentration, but that it is improbable that the concentration of drug used could ever be attained in the body. Work which is under way indicates that these drugs do not act specifically on the uterus, but on smooth muscle in general, and that this general action would overbalance any favorable action on the uterus. The authors conclude that the drugs examined are practically worthless and that their use is harmful as well as futile, since such use tends to perpetuate therapeutic fallacies (Journal A. M. A., August 12, 1916, p. 490).

Radio-Rem.—The Council on Pharmacy and Chemistry reports that those who are well informed on the subject of radium therapy are of the opinion that the administration of small amounts of radium emanation, such as those generated by certain outfits, is without therapeutic value. Having voted not to admit to New and Nonofficial Remedies any radium emanation generator which produces less than two microcuries of emanation during twenty-four hours, the council voted not to accept Radio-Rem outfit No. 3, Radio-Rem outfit No. 2, and Radio-Rem outfit C., each of which is admitted to produce less than two microcuries of emanation per day (Journal A. M. A., August 19, 1916, p. 631).

Olio-Phlogosis.—The Council of Pharmacy and Chemistry reports that Olio-Phlogosis (The Mystic Chemical Company, Kansas City, Mo.) is not eligible for admission to New and Nonofficial Remedies. Olio-phlogosis is to be applied externally by means of a cotton pad for pneumonia, bronchitis, pleurisy, etc. According to information sent to the council, it consists of glycerin to which has been added small amounts of essential oils, iodin, resorcinol, boric acid, quinin bisulphate and sodium thiosulphate. The council concluded that the claims for Olio-phlogosis are unwarranted, that its composition is complex and irrational, and that the nondescriptive and therapeutically suggestive name is likely to lead to uncritical use (Journal A. M. A., August 19, 1916, p. 631).

Novocain.—Novocain was introduced about twelve years ago with the claim that it was from one-sixth to one-tenth as toxic as cocain. Hatcher and Eggleston have recently shown that the toxicity of cocain varies widely with different individuals and with the rate of its absorption into the circulation, and that novocain shows far greater variations. The authors are of the opinion that novocain has a distinct field of usefulness, but call attention to the fact that death has followed the clinical use of small doses and that toxic symptoms have been reported by numerous observers (Journal A. M. A., August 26, 1916, p. 685).

Quality of Chlorinated Lime.—J. P. Street, chemist in the Connecticut Agricultural Experiment Station, reports that of twenty-five samples of chlorinated lime (bleaching powder) which, according to the United States Pharmacopeia, should contain "not less than 30 per cent of available chlorin," only three were found of full strength. Eight contained but traces of available chlorin. This is a dangerous situation when it is recalled that the public as well as the medical profession puts great dependence on the disinfecting powers of this inexpensive material (Journal A. M. A., August 26, 1916, p. 695).

Obituary.

Dr. William A. Brown.—Dr. W. A. Brown of Monticello, age seventy-four, died at his home, September 6, 1916. Dr. Brown moved to Arkansas from Tennessee in 1873 and practiced medicine in Drew County from 1889 to his last illness. He is survived by five children, Duffie Brown of Monroe, La.; Will Brown of Colorado, C. J. Brown of Hamburg, Mrs. Ed Ahrens and Miss Bessie Brown of Monticello.

County Societies.

INDEPENDENCE COUNTY.

(Reported by Paul H. Jeffery, See'y.)

The Independence County Medical Society met in the courthouse at Batesville, August 14. Members present: Craig, Hinkle, Robertson, McAdams, Dorr, E. M. Gray, Johnston, F. A. Gray and Jeffery.

Courtesies of the floor were extended to Drs. Hook, W. D. Gray and J. Johnston.

Dr. M. S. Craig reported two unusual cases of malaria. Dr. O. J. T. Johnston reported a case of chancre of the lip.

Committees appointed: Red Cross Work—R. S. Robertson, Sulphur Rock; E. M. Gray, Floral; L. T. Evans, Mt. Pleasant; F. A. Gray, Batesville; Paul H. Jeffery, Bethesda. Program for Next Meeting—Hinkle, Robertson, E. M. Gray, Hayden, McAdams and Evans.

PULASKI COUNTY.

(Reported by Geo. B. Fletcher, See'y.)

The Pulaski County Medical Society was called to order in regular session at 8:10 p. m., August 21, with the following members present: Drs. Judd, Cates, McRae, Strauss, Witt, Bailey, Kirby, Fletcher, Bond, May, Doyne, Pettus, Freemeyer, Daly, Holiman, Robinson, Davis, Meriwether, Gibson, Harris, Stover, Jobe, Wilkes, Pate, Saxon, Carmichael, Snodgrass, Dooley, McCurry, Bathurst, Ogden and Searborough.

Under the head of report of clinical cases Dr. Carmichael reported a case in which he had found entameba in large numbers in a smear from the gums, but after the administration of emetine and cleaning the teeth, he is now unable to find entameba—the patient has gained in weight and his distressing symptoms have disappeared.

Dr. Snodgrass reported a case of typhoid fever which developed symptoms of gall bladder trouble later, later passed a gall stone.

Dr. McRae, the essayist of the evening, read an interesting paper on "Mental and Nervous Symptoms of General Diseases." The paper was discussed by Drs. Snodgrass, Carmichael, Gibson, Pettus, Fletcher and Cates.

Dr. Ogden, chairman of the Library Committee, reported that the sum of seventy dollars had been paid to the librarian, who had now finished cataloguing our library; the "Index Medicus," covering the years 1911-1916, had been received; all Journals had been sent away for binding and should be here during September.

A communication from Maj. R. U. Patterson, U. S. A., requesting that this society form a Committee on Red Cross Medical Work, was read and the following committee was appointed: H. H. Kirby and George B. Fletcher (ex-officio), W. A. Snodgrass, A. E. Harris and R. L. Saxon.

Our president, Dr. H. H. Kirby, presented us with cigars and Dr. C. E. Witt very generously invited us to take a drink (soft) with him after the meeting.

There being no further business, the society, on motion, adjourned at 9:40 p. m.

Book Reviews.

THE CLINICS OF JOHN B. MURPHY, M. D., at Mercy Hospital, Chicago. Volume III, Number 3 (June, 1916). Octavo of 176 pages, 42 illustrations. W. B. Saunders Company, Philadelphia, 1916. Price per year: Paper, $8.00; cloth, $12.00.

Among the interesting articles in this volume is the "Talk on Certain Abdominal Operations," by Dr. R. C. Coffey.

THE CLINICS OF JOHN B. MURPHY, M. D., at Mercy Hospital, Chicago. Volume V, Number 2 (April, 1916). Octavo of 176 pages, 32 illustrations. W. B. Saunders Company, Philadelphia, 1916. Price per year: Paper, $8.00; cloth, $12.00.

A very interesting article is given in this number on the "Surgery of the Tendons and Tendon Sheaths." Synopsis: The Newer Anatomy; Tendons; Rupture, Luxation, Tumors, Wounds and Infections, Transference; the Tendon Sheaths; Inflammations; Tumors.

THE MEDICAL CLINICS OF CHICAGO.—Volume I, Number 5 (March, 1916). Octavo of 220 pages, 67 illustrations. W. B. Saunders Company, Philadelphia, 1916. Published bi-monthly. Price per year: Paper, $8.00; cloth, $12.00.

An article of unusual concern is found in this volume on "Roentgenologic Aspects of Intestinal Stasis," by Dr. James T. Case, St. Luke's Hospital. A new theory is given as to the causation of intestinal stasis. Description is given of peristaltic and anti-peristaltic activities. Many illustrations are shown.

THE MEDICAL CLINICS OF CHICAGO.—Volume I, Number 4 (January, 1916). Octavo of 220 pages, 34 illustrations. W. B. Saunders Company, Philadelphia, 1916. Published bi-monthly. Price per year: Paper, $8.00; cloth, $12.00.

The leading article in this issue is by Dr. Frederick Tice, Cook County Hospital, on "Epidemic Cerebrospinal Meningitis." Detailed technic of lumbar puncture and examination of cerebrospinal fluid. The diagnosis and treatment is given.

THE MEDICAL CLINICS OF CHICAGO.—Volume I, Number 6 (May, 1916). Octavo of 293 pages, 24 illustrations. W. B. Saunders Company, Philadelphia, 1916. Published bi-monthly. Price per year: Paper, $8.00; cloth, $12.00.

The first article in this edition is from the clinic of Dr. Walter W. Hamburger, at the Cook County Hospital, on "The Allen Treatment of Diabetes." A modification of Allen method for diabetic patients, and specimen diabetic diet are given.

THE MEDICAL CLINICS OF CHICAGO.—Volume II, Number 1 (July, 1916). Octavo of 220 pages, with 41 illustrations. W. B. Saunders Company, Philadelphia, 1916. Price per year: Paper, $8.00; cloth, $12.00.

In this number of "The Clinics," a very instructive paper is given by Dr. A. R. Edwards, Michael Reese Hospital, on "The Use of Digitalis." He gives—"General indications and contra-indications. Digitalis indicated for cardiac insufficiency of whatever type. Action in individual valvular lesions. Toxic manifestations. Avoidance of cumulative action. Preparations and administration. Adjuvants and symptomatic therapy."

PROGRESSIVE MEDICINE.—A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences. Edited by H. A. Hare, M. D., assisted by L. F. Appleman, M. D., Philadelphia. Volume XIX, Number 2 (June, 1916). Published by Lea & Febiger, Philadelphia. Price per year, $6.00.

The contents of this volume are as follows: "Hernia," by William B. Coley, M. D.; "Surgery of the Abdomen, Exclusive of Hernia," by John C. A. Gerster, M. D.; "Gynecology," by John G. Clark, M. D.; "Diseases of the Blood; Diathetic and Metabolic Diseases; Diseases of the Thyroid Gland, Spleen, Nutrition, and the Lymphatic System," by Alfred Stengel, M. D.; "Ophthalmology," by Edward Jackson, M. D.

PROGRESSIVE MEDICINE.—A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences. Edited by H. A. Hare, M. D., assisted by L. F. Appleman, M. D., Philadelphia. Volume XIX, Number 1 (March, 1916). Published by Lea & Febiger, Philadelphia. Price per year, $6.00.

The contents of this volume are as follows: "Surgery of the Head and Neck," by Charles H. Frazier, M. D.; "Surgery of the Thorax, Excluding Diseases of the Breast," by George P. Muller, M. D.; "Infectious Diseases, Including Acute Rheumatism, Croupous Pneumonia and Influenza," by John Ruhran, M. D.; "Diseases of Children," by Floyd M. Crandall, M. D.; "Rhinology and Laryngology," by George B. Wood, M. D.; "Otology," by Truman L. Saunders, M. D.

GYNECOLOGY.—By William P. Graves, M. D., F. A. C. S., Professor of Gynecology at Harvard Medical School. Octavo volume of 770 pages, with 424 original illustrations, 66 of them in colors. W. B. Saunders Company, 1916, Philadelphia. Cloth, $7.00 net; half morocco, $8.50.

The author of this book makes his descriptions in three parts. Part 1 deals with the physiology of the pelvic organs and with the relationship of gynecology to the general organism. Among these we find a description of the "Relationship of Gynecology to the Skin," including the menstrual changes in the skin and post-operative eruptions.

Part 2 includes a description of those diseases which are essentially gynecologic—the underlying pathologic processes are enumerated.

Part 3 is devoted exclusively to the technic of gynecologic surgery.

Original illustrations describe the procedure of the operations.

INFECTIONS OF THE HAND—A GUIDE TO THE SURGICAL TREATMENT OF ACUTE AND CHRONIC SUPPURATIVE PROCESSES IN THE FINGERS, HAND AND FOREARM.—By Allen B. Kanavel, M. D., Assistant Professor of Surgery, Northwestern University Medical School; Attending surgeon Wesley and Cook County Hospitals, Chicago. New (3d) edition, thoroughly revised. Octavo, 498 pages, with 161 illustrations. Cloth, $3.75 net. Lea & Febiger, publishers, Philadelphia and New York, 1916.

The practical character of this work may be shown by the following quotation from the preface: "The chapters are so grouped that the busy practitioner can find the part dealing with his particular case quickly. Given a case in which the practitioner is in doubt, he should read the chapter upon 'Diagnosis and Treatment in General.' This will indicate the group into which his case falls, and will also direct him to the proper sections of the book where cases of that nature are treated in detail." Any physician who carefully follows Kanavel will have his conception of the subject greatly clarified. The various chapters on treatment of different conditions are very full, the technic is well described, and the after-treatment is carefully given. The illustrations are remarkably clear and instructive. Following several of the chapters, a definite, complete resume is given, which will be found most helpful.

Blood Pressure—Its Clinical Applications.—Second edition, revised and enlarged. By George W. Norris, A. B., M. D., Assistant Professor of Medicine in the University of Pennsylvania; Visiting Physician to the Pennsylvania Hospital; Assistant Visiting Physician to the University Hospital; Fellow of the College of Physicians of Philadelphia. Octavo, 424 pages, with 102 engravings and one colored plate. Cloth, $3.00 net. Lea & Febiger, publishers, Philadelphia and New York, 1916.

The importance of blood pressure in diagnosis, prognosis and treatment is becoming more widely recognized every day, and with this recognition has come the creation of a literature devoted to this special field. Dr. Norris has given an adequate description of this important field, clearly elucidating the principles involved and carefully pointing out their practical applications. The illustrations are well chosen and a help to the easy understanding of the text.

Obstetrics, Normal and Operative.—By George Peaslee Shears, B. S., M. D., Professor of Obstetrics and Attending Obstetrician at the New York Polyclinic Medical School and Hospital. 745 pages, 419 illustrations. Published by J. B. Lippincott Company, Philadelphia and London. Price, $6.00.

This book gives the author's result of a fairly extensive experience in the hospital, private and consulting practice of obstetrics. In this book particular attention is given to the clinical practice of obstetrics. Quoting an example, Dr. Shears states: "If in the course of a difficult version the operator finds it impossible to grasp a knee or foot, the difficulty may sometimes be obviated by the simple expedient of turning the patient upon her side." We also find that the essentials of the theory of pure obstetrics has not been neglected. The book is well illustrated.

Rules for Recovery from Pulmonary Tuberculosis.—A layman's hand-book on treatment. By Lawrason Brown, M. D., of Saranac Lake, N. Y. Second edition, revised and enlarged. 12 mo., 184 pages. Cloth, $1.25 net. Lea & Febiger, publishers, Philadelphia and New York, 1916.

Having for years been associated with the late Dr. Trudeau in his tuberculosis work at Saranac Lake, N. Y., Dr. Brown knows the problems which confront the consumptive, who would live a life that shall make him an acceptable member of society, rather than a person to be shunned. If a permanent cure is to be affected, it is necessary that the patient shall learn how to co-operate intelligently with those who prescribe and care for him. This hand-book gives in brief and simple form all that is necessary for the patient to know in order to render such co-operation. This book is an ideal one to put in the hands of consumptives, and of those who have to care for them.

A Text-Book of Pathology.—By William G. MacCallum, M. D., Professor of Pathology in the College of Physicians and Surgeons, Columbia University, New York City. Octavo volume of 1,085 pages, with 575 original illustrations. W. B. Saunders Company, Philadelphia, 1916. Cloth, $7.50 net.

This text-book of pathology by William G. MacCallum, M. D., Professor of Pathology, College of Physicians and Surgeons, Columbia University, N. Y., is especially adapted for students of internal medicine and surgery. The classification of subjects is especially well arranged. The subjects included in this work are completely covered, with the exception of bone tuberculosis and malaria; these subjects are given too little importance. The histological drawings are excellent, the colored plates are gems of the printers' art. The book will be of great assistance to busy workers who wish to obtain essential facts and not long-drawn theories about pathological conditions.—W. A. S.

FOCAL INFECTION IN SKIN DISEASES.

M. L. Ravitch, Louisville, Ky. (Journal A. M. A., August 5, 1916), reports a series of cases illustrating the relations of focal infection to certain dermatoses. He says that it is an unfortunate fact that dermatologists have too much neglected the search of true etiologic factors in skin disease and given more attention to nomenclular and classification. There has been a change recently in this regard, and credit is due to Billings and Rosenow, whose theory of focal infection has opened our eyes to the explanation of certain dermatoses of obscure etiology only a few years ago. With the key we now have we can trace relationship and diagnose intelligently. The cases he reports illustrate his statements, and they are only a few selected ones out of many. Not all systemic and skin derangements are due to focal infection. Many obscure diseases may be traced to faulty internal secretions, but these again on their part may be due to focal infection. It all teaches us to be on our guard and thoroughly examine doubtful cases, and above all, he says, let us treat the skin not as a surface only, but as a cutaneous organ, as capable of infection from within as any other organ.

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LUME XIII
No. 5

LITTLE ROCK, OCTOBER, 1916

Yearly Subscription $1.00
Single Copy 25c

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THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIII. LITTLE ROCK, ARK., OCTOBER, 1916 No. 5

Original Articles.

CARRIERS AND EPIDEMICS.*

By C. W. Garrison, M. D., State Health Officer, Little Rock.

Ever since it was discovered that germs caused disease, the question of carriers has been an interesting subject. During the past generation the medical profession has had occasion to change its teachings relative to the etiology of many diseases. Consequently, the method of control has changed likewise.

A great deal more importance has been attached to the carrier as a factor in the spread of communicable diseases in the past decade, and on the other hand much less importance has been given to fomites as a medium by which contagion may be transmitted.

As more accurate knowledge is ascertained concerning the communicability of diseases, public health regulations naturally become more rational and less imperical. For instance, yellow fever formerly was a quarantinable disease, and cities and counties, even states, were quarantined, entailing tremendous commercial loss. Now all that is necessary to control it is simply to isolate the patient and effectually screen against mosquitoes. If carriers could be controlled, epidemics would seldom occur. It is generally held now that contagious diseases are communicated only by contact, that is, receiving the contagion direct from the patient or carrier. Evidence seems to indicate that a zone, with a rather definite radius from one to three feet, is established around the infected person in which only is the disease transmissible. This due to expiration, coughing, sneezing, etc. This zone varies possibly with changing atmospheric conditions. Fortunate it is for us that most pathogenic bacteria of the contagious group will only remain virulent for a few minutes when exposed to air and sunshine and not on a mucus membrane.

Assuming this contact theory to be true, the New York City Board of Health instituted a series of experiments by taking a certain section of the city and withholding fumigation of measles, scarlet fever and similar diseases for a period of months, and comparing its morbidity rate with that of similar periods in previous years. Also by taking a section in which an epidemic of some erythematous disease was prevalent, dividing it into districts, carrying out fumigation rigidly in some and no fumigation in other districts, and the morbidity rate compared. These experiments showed that there was no increase in the morbidity rate in the districts not fumigated over those where careful fumigation was carried out.

Since experiments show, however, that fumigation will kill or render inert bacteria in culture media, the Arkansas State Board of Health holds that it is not altogether safe to dispense with fumigation, as many persons are careless with sputa and other waste matter from the body that might furnish a favorable media. An intelligent use of soap, water, a scrub brush and sunshine is efficacious, but to dispense with fumigation entirely might beget carelessness.

Only a comparatively short time has elapsed since it was discovered that one person might become a carrier of a disease without developing symptoms and transmit the disease to someone else. Quite an interesting discovery was made by Dr. William Litterer of Nashville subsequent to the Dyersburg, Tenn., epidemic of cerebrospinal meningitis, early in 1913. Cultures were taken from the throats of a group of suspected contacts and about 12 per cent were found to be carriers. A few of these carriers developed meningitis later. An opportunity was afforded to observe some of these carriers over a period of a year or

*Read before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2, 3, 4, 1916.

more. At times the diplococcus intracellularis meningitis could be isolated. Then a period of several days or several weeks would elapse, when repeated examinations would be negative. Then a period of a few weeks in which demonstration was readily made.

In Lepanto, Ark., in 1913, epidemic cerebrospinal meningitis became so prevalent and there had been so many unknown contacts it was deemed advisable to quarantine the town. Two men disregarded the order, evaded the guard one night, and went to a rural community in Jackson County, where, in about two weeks, seven cases developed and one of the men developed the eighth case.

Dr. Litterer's findings furnish the best explanation for the apparent sporadic outbreak of epidemics, as an unknown carrier may go into a community, remain for a time and transmit the disease to some resident that will give rise to the expression, "No one has had this disease in this community and this person has not been out of the community." In the Lepanto epidemic it was impossible to determine the origin of the first case, as it occurred five miles northeast in the country in an old lady who had never been further away from home than Lepanto in ten years. As other cases developed, the jailer in Lepanto said that several weeks previous to the old lady's illness an unidentified man was found unconscious on the street one morning and carried to the jail, where he died in about twenty-four hours, with symptoms similar to those in patients whom he saw later, and that this old lady from the country brought butter and eggs to the jail.

During the late fall and early winter months of 1915, a threatened epidemic of diphtheria occurred in Little Rock, and as it showed evidence of spreading through the schools, the hygienic laboratory of the State Board of Health and the city laboratory undertook to control the disease by determining, if possible, the carriers. Sixty-eight cases developed during the epidemic, thirty-two cases being notified at one time. Cultures were made from the throats of 9,022 school children. Of this number 824 were positive, or carriers, and 8,198 negative. The hygienic laboratory examined 7,162 children, 457 positive, 6,705 negative. The city laboratory examined 1,860 children, 367 positive, 1,493 negative. The relatively high percentage of carriers found by the city laboratory is accounted for because it undertook the work first, and only children with sore throats were examined in the beginning, while the hygienic laboratory made a survey of all children. More cases of diphtheria were notified from the Robert E. Lee School than any other, and there the percentage of carriers was found to be proportionately higher. All the carriers were sent home, isolation ordered, and the parents notified to call the family physician. Two of the carriers sent home are known to have developed diphtheria.

Smallpox has been prevalent to a more or less degree in many sections of the state, but in almost every locality where it has occurred, one confluent case, or more, developed and resulted either in death or blindness.

The authorities estimate that from one to five per cent of persons convalescent from typhoid are carriers, and remain so from one to five months, and in some instances for life. The origin of several severe epidemics has been traced to carriers who were servants in the kitchens or dairies. Recent typhoid epidemics in Arkansas have been caused by water or milk contamination from acute cases. Two hundred and forty or more cases occurred in Little Rock in 1910. It was discovered that a dairy six miles in the country furnished milk to all these people and that a case of typhoid had occurred at the dairy without any effort to protect the patient or the milk from flies. In the fall of last year, typhoid began to appear in Helena. The water was found good, but a family who furnished these persons milk was found to have unprotected typhoid in the home. Amity in 1914 had about twenty-five cases to develop on account of water contamination. The first case was imported and resided on the crest of a hill. The excreta was not properly disposed of, but placed in an open-back closet. All families living on this ridge had surface wells in the back yard and open-back closets thirty to fifty feet from the wells with an earth strata running obliquely from the closet to the bottom of the wells, and one case after another developed until every home had one case or more of typhoid. West Helena's typhoid came from surface contamination of the water supply. Rogers, Harrison, Eureka Springs, Fayetteville and other beautiful cities in the Ozarks have suffered unspeakably from typhoid due to contamination from surface privies and surface drainage through the rising and dipping lime strata into the springs which furnish the source of water supply.

Harrison notified about 200 cases of typhoid in 1914, and not until drastic steps were taken to purify the water supply was the epidemic stopped. Rogers, according to physicians, had never been entirely free of typhoid fever for ten years, and in the winter of 1914-1915 about 300 cases were notified. The water was found to be contaminated, ordered treated, and after the incubation period elapsed not a single case has developed in over a year.

Now, gentlemen of the Arkansas Medical Society, why this presentation of epidemics? For a number of years this society labored diligently to secure the enactment of a public health law, and in 1913 secured one of the best in the United States. True, there are a few unfortunate clauses in it that have caused litigation and delayed in some counties the registration of births and deaths, and county judges have withheld their approval of county health officers and refused to allow an appropriation for the office, but the one thing that has been the greatest obstacle in the popularizing and execution of the rules and regulations promulgated by the board has been the lack of hearty support and co-operation on the part of the medical profession.

One of the most essential things in the control of any communicable disease is the prompt reporting of same by the attending physician to the local health officer. Morbidity statistics are as necessary in the effective control of epidemic diseases as mortality statistics in determining the birth and death rate, and yet, less than 10 per cent of the physicians of the state have made regular reports of notifiable diseases to the local health officers, and only 15 per cent have returned self-addressed franked postal cards sent out from time to time to collect morbidity statistics, and some of the officers of this society have not made a report of any kind in over a year.

It is the humble opinion of the essayist that this is not a true index of the altruism or loyalty of the medical profession of this state, but is rather inclined to believe that it is carelessness and thoughtlessness, yet most every week a questionnaire is received from some other city, state or national health board asking for morbidity or mortality statistics. A good many requests from business organizations and insurance companies have been received seeking information as to mortality and morbidity rates for the purpose of determining whether or not Arkansas is a suitable field for investment. The business men of the North and foreign countries seem to be much more careful to investigate the health of a community before investing than those of the South. It is now known that Arkansas has a State Board of Health and the reports we are compelled to send out are but a reflection on the medical profession.

At present the hygienic laboratory attempts to make examinations free of all specimens sent to the laboratory, as follows: Sputum from tuberculosis; blood for malaria and typhoid fever; feces for intestinal parasites; cultures for diphtheria; spinal fluid for cerebrospinal meningitis, and the brain of animals for the determination of rabies. Water and milk will be examined only when, in the opinion of the state health officer, they are responsible for outbreaks of disease.

It should be the function of the state laboratory to examine all water and milk furnished for public consumption, outside of cities not maintaining a laboratory, as well as Wasserman's, differential counts and section work. It should also be its function to furnish free serums and bacterins to the indigent poor of the state, and at cost to the laborer who constitutes its bone and sinew and maintains the morale of the country.

A full time county or district health officer should be maintained on a civil service basis, and all the conniving influences of politics and a general practice removed. Arkansas will some day live up to her full obligation to her people from a public health point of view, and it will be a great economic gain.

It seems well for Arkansas that she is to have for her next governor a lifelong student of political economy, who seldom makes an address without referring to the great need of sanitation, public hygiene and preventive medicine.

First always before a well-organized state health system comes the well-organized co-operating state medical profession. Let me most humbly solicit the good will and assistance of every practicing physician in the state, and insist that you make your reports regularly and promptly, and when you have a doubtful case of diphtheria, send a culture to the laboratory, observing the rules of isolation in the meantime, and when you have a suspicious case of chickenpox, or smallpox, regard it as the latter and treat it as such until time clears up the diagnosis. Or, when you have a case of continued fever, send a

specimen of blood to the laboratory and regard it as communicable from the onset, as all fevers should be, until proven otherwise.

It is an impossible task to make any great headway in the control of disease in this state until such assistance is secured, and when it is, all obstacles and objections on the part of the laity will fall away.

May I further ask that each of you interest your senator and representative to the extent that a sufficient appropriation can be secured to gradually increase the scope and efficiency of the State Board of Health in all of its departments? "May we have the power to discern what is right, and the fortitude to practice what is good."

DISCUSSION.

Dr. A. G. Lee (Texarkana): I am truly thankful to Dr. Garrison for his compliment in selecting me to discuss this paper. I really wanted a little more than two minutes, however, because I had written my discussion and wanted to go over this paper fully.

As for the carriers in these epidemics of communicable disease, I have the same respect for them that I have for the fomites; but I regard the carrier as occupying the first place. He is, so to speak, a fomes. As for the zone about the patient, that zone is, as the doctor says, about three feet. That is governed by the force of expulsion of the sneeze or expectoration. There are other means of carrying these boclesia. For instance, I have diphtheria. There is a fomes (handkerchief). I rub off my coat there and pick up a baby. The baby plays with my coat, it is handed over to the nurse and it nestles in the arms of the nurse, and the nurse goes home and handles her baby, which succumbs to the disease. So, you see the means of transmission.

I had a little experience. I happen to be the health officer at Texarkana. I was having trouble in the schools here with smallpox. It would crop out here and there. I used fumigation. I would not trust it to the janitor. I would go and do it myself. I used every precaution, but occasionally another case would crop out. I could trace it directly to this certain school, and to one room. So, it occurred to me this idea about the fomites, and I got some carbolized oil and went to the school and went all around its wainscoting, which was up as high as a child in that grade could reach. I went all over that myself. Then I made the janitor take it and go right over it again under my supervision the next day, also using same on the desks and floor, and I have had no further trouble that I could trace to that source. I used an abundance of fumigation and got fair results; but this idea occurred to me as being more satisfactory than fumigation, and I am sure that I got better results from it. I have greater respect for this process, the simplified soap and water, you might say, than I have for fumigation.

I wanted to give you some vital statistics, something in the form of a plea to you gentlemen, something that you need and some suggestions that we need from you. We are begging it from you.

Dr. A. F. Hoge (Fort Smith): I think Dr. Garrison's paper is most timely, and has been a most important one—one we should take to heart and resolve, each for himself, to do better. The vital statistics of Arkansas have been a disgrace to the state, because of the inaccuracy of those that have been presented. Some time ago I had occasion to look up the vital statistics of the United States to see the number of deaths from certain causes, and, to my surprise, only twenty-three states are listed as within the registration area, and Arkansas was not amongst the number. We can change that by our co-operation with the health authorities and put Arkansas on the list of advanced states, and, when we do that, the death rate will be lower in Arkansas and the morbidity rate will be lower, and we will find means of handling these carriers to better advantage.

One thing that was stressed a little in the paper, and I think we should regard with more importance, and that is tuberculosis. It is one of the most troublesome of all communicable diseases in the civilized world, and at present is handled very inadequately. It strikes me that every patient having tuberculosis is a carrier in every sense of the word, and without the actual carrier we would soon be without that dread disease. And, if we had means of preventing people having tuberculosis from working in trades or being employed in occupations that would place them in a position to carry it, we would limit it to a great extent. I refer to dairies, bakeries, groceries, confectionery shops, barber shops, and places of that sort. Every once in a while you will see employed in a bakery shop or a barber shop, a man having tuberculosis. You could not ask for a better opportunity to spread the disease than in some of these occupations. By co-operating with the health officers, however, we can help them educate the public to the point where they will demand that we carry out measures that will stop or tend to check these various diseases that are communicable.

Dr. J. H. Weaver (Hope): This is a very interesting subject, one that I think should be discussed very freely. Inasmuch as Dr. Lee could not answer some questions, I would like to yield my five minutes to him.

Dr. Lee (resuming): Thanking Dr. Weaver for this unexpected kindness. In regard to the vital statistics, the form that the health officer sends out to a doctor for the communicable diseases has fifteen questions, and I have gone over them and find that in sending them out, if you get any return of the card at all, you will get not more than five answers positive, and ten there will be no attempts to answer. It is a hardship on the doctor. You get the name of the disease, and the name of the patient; but the patient's address, the school attended and the number in the household and such as that, you will not get. As to the birth report, there are thirty questions, and to twenty of those you will get no answers, or if you get the report at all, there are ten you will probably get answered positive, and twenty there will be no attempt to answer. I have sent out to twenty-five doctors in the last year 125—I sent five or ten to each doctor, according to amount of his practice—and in that length of time I have gotten back three; one with two questions answered, one with three questions answered, and one with five questions answered. So, that you get some idea as to the difficulty that the doctor has in filling out these cards, and that's the reason; it is complicated; it is a hardship for the doctor to fill out those things. And whenever these questions are so formulated as to work a great inconvenience and hardship on the community doctor, you are going to find that he will be negligent in complying. But, the health officer comes to you, and all health officers come to you, with the plea for your indulgence and a request for you to assist him in this matter, to render him all the assistance and co-operation you can. And it is our desire as head officer that you look at it in that light. Who is he? How came him to be here? Who made the office? The legislature doesn't care anything about the health office, and the laity are not concerned in its benefits, except as you, as physicians educate them; but you

people—we people—are responsible for the establishment of the State Health Officer, and he is an agent of yours. He is your servant, and he will do more to assist you in compiling these than anyone else, and I come to you begging you to assist—put yourself to a little more trouble to help him than before. I don't have the trouble with the ex-health officers that I have with those who haven't had experience as health officers, because they realize the situation and gladly co-operate. However, in regard to the communicable diseases, I want to thank my doctors here for reporting the diseases and the co-operation that they have extended to me in this work. They don't fill out these cards like they should. I don't have a great deal of trouble with them, with the exception of a very few; they will phone me immediately, even if it is a questionable case, and I want to assure everyone of them that I appreciate this. These cards I fill them out myself, and if there is any other health officer in the house, that's the way for you to do. Don't wait for your doctor to report them. As soon as he reports a communicable diseases, put a card in your pocket or in your grip, and go and visit this disease, and when the madame meets you at the door tell her you would like to get a little history of the case. Thanks again for your indulgence, and Dr. Weaver for his kindness.

(Dr. Lee was told by the chairman that his time was up.)

Dr. L. Kirby (Harrisou): I just want to ask one question of Dr. Garrison, if the health board furnishes the physicians over the state proper containers for them to send in these specimens.

Dr. T. M. Fly (Little Rock): I waut to remind this society that a great many employees of dairies are syphilities, and they are constantly spreading that diseases. At the medical college where I have a clinic twice a week, about 90 per cent of our patients are syphilities, and we have several who have been there this term of school with active syphilis who worked at dairies in Little Rock. I wish that would bear ou the minds of those gentlemeu who use milk from dairies to such a degree that they insist that a Wasserman test be made on all employees of dairies, and that if it be positive, to exclude them from working there.

Dr. Garrison (closing discussion): I am going to take only a few minutes. We are absolutely helpless with our lack of funds and assistance to execute all violations. If Dr. Fly has reported those cases of syphilities who are attendants at those dairies, he has to that extent co-operated with and assisted the local health officers, and unless we get that co-operation we cannot carry out this work.

As to containers, they will be furnished free to every one who makes application to the laboratory for them.

As to these forms, this is only an arbitrary blank, and we endeavored to get them up to get as complete information as we could in a concise way, and maybe they could be improved on.

But, as to these birth and death certificates, I want to say, that our Bureau of Vital Statistics was inaugurated by the men detailed by the Bureau at Washington, and these are the forms required; not suggested, but absolutely required by the Bureau, without any variation whatever. They come down and check us up frequently. About a month or six weeks ago they sent a man down there to check us up; but, on account of our lack of funds, our record is not complete enough nor accurate enough. If we make any variation from these blanks, we may get better details of the birth and death rate; but we will never get any recognition from the Government.

Dr. Kirby: Regarding these blanks covering reports of deaths, have you got a supply on hand all the while?

Dr. Garrison: It is very limited; and our appropriation has beeu absolutely cut off by the Governor's veto. Ouce we had a few hundred dollars on hand, and, by close economy, we are going to be able to furnish blanks to everyoue.

Dr. Kirby: The health officers don't stay here?

Dr. Garrison: The health officers should make application to the central office.

I haveu't time to take up the question of fomites. That is a whole afternoon's discussion in itself. Dr. Lee does not coincide with the views of other authorities. I grant you I am not willing to accept wholly what you are asked to believe by some of the eminent authorities, and that is the very reason the State Board of Health has not yet thrown down the bars. The idea of fomites being carried on the clothing has been disregarded by many State Boards and the United States Goverument. They say you can't transmit smallpox with a rag. If you could carry it on your clothes, the doctors in this house would have infected every community; because, we go in a house where there is diphtheria, scarlet fever, smallpox, or other contagious diseases, sit down on the bed and wait on the case.

The question of fomites has been much discussed pro and con. It is easy to get them on your clothing, but if you do a few minutes exposure to the suulight will destroy them.

The sunlight is our salvation.

DYSENTERY.*

By Thos. F. Hudson, M. D.,
Luxora.

To deal with all conditions to which this term—dysentery—might be applied, would, in a paper like this, be impractical, so I will confine my remarks to entamebic and bacillary dysentery and draw my deductions from five cases recently treated, two of the bacillary type and three of the entamebic type.

It is perhaps improper to use the term "dysentery," as more recent students and writers prefer to classify this group of diseases which manifest themselves by "frequent bloody evaeuations containing mucous and accompanied with abdominal pain and rectal tenesmus" as colitis. The small intestine are rarely involved, and the classification beeomes more simple by referring to the condition as bacillary colitis, entamebic eolitis, syphilitie colitis, etc.

To be able to classify the group, a study of the feees is the most important faetor. We must bear in mind that the organisms producing the disease are frequently associated with other organisms, entamebic hystolitica, bacilli of various types, helmiths, balantidii coli, coccidia, flagellates and streptococci are the frequent types found.

*Read before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2, 3, 4, 1916.

The severity of the baeillary types varies as to the type of organism produeing the disease in the case studied, the Shiga baeillus being mueh more severe than Strong's, Duval's or any other.

Tropical climates give the greater number of eases; in faet, it was supposed a few years ago that entamebic dysentery was not found, exeept in those who live in tropical elimates or those who had lived there.

It was, no doubt, in the beginning a tropieal disease, but now it is rather eommon in many sections of our country.

All types are very infectious, either by direet eontact or by water, milk, fresh vegetables and other infeeted foods. The fly plays an important part in the transmission of the disease. Eneysted entameba are rather diffieult to destroy, and baeilli of the various types withstand the elements for months, henee the great necessity for absolute eleanliness in handling all eases.

Entamebic dysentery is rather rare in young ehildren, while in my praetiee baeillary dysentery is very rare in the adult. The latter is very much more fatal and severe during the first few weeks, the mortality ranging from 5 to 20 per cent as given by various authors. Dysentery has in previous wars been a serious faetor, but our present knowledge enables us to better control these cases as well as all other types of infeetious disease.

The pathology of both entamebic and baeillary dysentery varies from a simple eatarrhal inflammation of the mueous membrane to ulceration and even gangrene. In entamebie the maseulature may be involved and perforation of the peritoneal coat is not unknown. One great difference in the two types is, in entamebic dysentery the uleer begins in the submueosa, the result of the entameba burrowing down. Mueh destruction results and frequent sinus formation, the proeess working toward the mucosa; while in baeillary dysentery the reverse is true, the mueosa being first involved and later the deeper struetures.

The severity of the lesions is usually dependent on treatment and whether or not there is pyogenie or pathogenie infection. It is well to bear in mind the eharaeter of the uleer in the entamebic type of infeetion when we come to treatment of these cases, as it is absolutely essential to destroy or remove all entameba, both in the bowel wall and within the canal. The loeation of the lesions may vary, but, as before stated, the eolon is the chief organ involved. The infeetion may begin in the reetum or lower colon and travel upward or in the ileoeecal region and travel downward. Strietures from either type are very rare.

Symptoms are aeute or chronie in both types, but baeillary type is more often aeute, the patient dying or recovering in a few days or a few weeks. In the entamebie type there is a tendeney to ehronieity, the patient suffering for months with debility and finally death. The symptoms vary very mueh in individuals, as to the severity of the infeetion and the stage of the disease. The Shiga baeillus, in the baeillary type, gives the most violent symptoms.

In aeute baeillary dysentery a chill is not uneommon, followed with a temperature of 101 to 104 degrees, fast pulse, thirst, aehing body, prostration, restlessness, headache, nausea and vomiting, delirium and an exhaustive diarrhea, ten to fifty evacuations daily, consisting of feculant matter, sero-mueous, and finally mueous debris and blood. Intense rectal tenesmus and abdominal soreness is noted. After a few days or weeks improvement may be noted or the symptoms may become rapidly worse, owing to absorption of toxins and sepsis, exhaustion ensuing, with coma, eollapse and death.

In entamebic dysentery the most common symptoms are six to twenty daily evaeuations of fecal matter, mueous and blood, with much reetal tenesmus, a loss of weight (depending on the duration and severity of the disease), furred tongue, poor digestion, appetite may or may not be impaired, anemia, headache and museular weakness following a mild diarrhea, with slight fever and perhaps a history of constipation alternating. Mueh soreness is noted along the eolon.

These symptoms may beeome aggravated and as a result of toxemia and sepsis, violent symptoms may ensue.

COMPLICATIONS.

Liver abscess is a eomplication of the entamebie type only, but as such is frequent and severe. Numerous other complications are noted in both this type and the baeillary type, but only a few will be mentioned, as follows: inflammation of the joints and tendon sheaths, appendicitis, intusserseption, stricture of the gut, hemorrhoids, proetitis, fistula in ano, fissure, thrombosis of the portal vein, edema of the feet and ankles, perforation of the gut, ete.

MORTALITY.

As before given, in both types, 5 to 20 per cent.

The diagnosis of entamebic dysentery is comparatively easy and the technic is so simple that any physician possessing a microscope should be able to make it. The patient can usually give specimens with the least effort. Tease out a small portion containing mucous and blood, and by fairly rapid work at room temperature a satisfactory examination can be made. The slide may be warm as well as the utensil containing the specimen. If unable to secure a specimen in the ordinary way, give epsom salts and use first movement; or a notched rectal tube may be inserted or finally curet through a proctoscope.

In bacillary dysentery, for the general practician, the diagnosis is very difficult, but is fairly safe by excluding other forms of dysentery and general diseases which might produce like symptoms as a result of toxemia, etc. Bear in mind that entameba hystolitica as well as other intestinal protozoa may complicate. It more frequently occurs in epidemic form, less often relapses into chronic form, and is more often acute and severe and kills the patient.

The agglutination test and culture may be taken advantage of; but in the absence of a well-equipped laboratory or an epidemic, I am sure this is not generally done. The blood serum agglutinates with the organism, producing the disease in the case in question, and likewise the cultural characteristics vary, we are told, and no doubt in the near future the process will become so simplified that we will be able to positively differentiate the cases.

Treatment embraces "prophylactic precautions, supportive therapeutics, internal medication, sero-therapy, colonic irrigations and surgical measures."

For entamebic dysentery emetine is a specific. Its effect was nothing short of magic in the three cases here reported. The method used was one daily dose of two-thirds to one grain by needle, with one ounce of epsom salts by mouth preceding, and only a small amount of liquid food, the treatment extending over a period of five days. The recovery was complete and no relapse.

In the more severe cases this would no doubt not be sufficient; and where there is doubt, the treatment should be repeated in ten days, as well as to use such supportive measures as are indicated. Pain and soreness follow the use of the emetine, but this can be largely prevented by clasping the tissues about the needle just before and during its withdrawal. The most careful attention should be paid to the care of the patient and the discharges from him, that the disease not be spread to others. After an improvement in symptoms an ordinary diet may be resumed.

The bacillary type is much more difficult, and with my cases nothing seemed to relieve. Irrigations were carefully tried out, saline, boric, protargol, quinin, etc. The starch and laudanum could not be used, as even it was disquieting and added much to the prostration of the patient.

Epsom salts, mercury, castor oil, tanalbin, bismuth (subgalate and subnitrate), bulgaric acid bacilli, salol, opiates by mouth and needle and supportive measures including digitalis, brandy, caffein, etc., were used. Emetine was tried out and no one thing seemed to possess great value. Opiates relieved pain, but did not prevent frequent bowel movements. Serotherapy was not tried.

The following very brief case reports show well the important points we have tried to bring out:

E. S., age forty-six, colored, male, farmer, consulted me in July, 1915. History of dysentery for one year, twenty to thirty daily evacuations; a number of relapses during that period; many drugs taken and little relief obtained; lost thirty-three pounds in weight; much weakness and cramp, general abdominal tenderness; temperature 99 degrees, pulse 82. Entameba hystolitica positive. Treatment consisted of emetine two-thirds grain on third to seventh, inclusive, daily with epsom salts, one ounce each morning. From seventh to tenth a rather high pulse rate and considerable weakness, but no blood or mucous. With the exception of some distress after the meal up to about the thirtieth, no evidence of disease has since existed, except gonorrhea during the latter part of August, and this was no doubt due to the improved physical condition. His weight now is 190 pounds (previous weight 153 pounds), and his health is perfect.

R. W., age twenty-one, colored, male, farm laborer, consulted me on November 20 with the history of dysentery three years ago and an apparent cure from the oral administration of salol coated ipecac pills. Present attack began in January (almost eleven months ago). Now six to ten evacuations of blood and mucous daily. Abdominal cramp and tenderness, much

loss of weight, and weakness. Temperature 100 degrees and pulse 100. Entameba hystolitiea positive. Emetine and epsom salts were given as before outlined, exeept the dose was one grain during the last three days. No blood after seeond day. Considerable headaehe and weakness during the fourth and fifth days of treatment. Four months later a report of thirty-five pounds gain in weight and stools were normal. Health now perfeet.

C. G., age twenty-seven, eolored, mill laborer, male, eonsulted me February 20, 1916. History of dysentery sinee August, 1915. Six to ten evaeuations daily, with mueh reetal tenesmus and abdominal eramp; lost fifteen pounds in weight. Temperature 98 degrees and pulse 80; eolon is quite tender. Entameba hystolitiea positive.

Treatment consisted of emetine in one-grain doses and epsom salts as in the other eases. No blood after seeond day and a eomplete symptomatie eure.

No other treatment was required in these eases exeept some general tonie and restrieted diets.

The two cases of baeillary dysentery are as follows:

L. P., female, white, age thirty-four, single; was seen for the first time on Oetober 14 with the following history: Chill on eleventh, with fever following; severe aehing, frequent bowel movements sinee the seventh; feeal matter and mueous; mueh reetal tenesmus and general abdominal soreness. Temperature 98⅖ degrees and pulse 92. Epsom salts, paregorie and aromatic sulphurie aeid were ordered to be followed with bismuth and salol.

16th. No relief obtained. Temperature 99 degrees, pulse 120; eighteen to twenty evaeuations of blood and mueous; inereased tenesmus. Borie irrigations ordered, but eould not be borne; bismuth inereased.

17th. Twenty to forty evaeuations of same eharaeter. Temperature 95⅕ degrees, pulse 116. Blood examinations showed no plasmodium and a differential eount of L. 17½, L. M. 7½, N. 75, and Eo. ½. Small doses of mereury with bismuth and opium ordered.

18th. No ehange. Temperature 99⅕ degrees, pulse 120; evaeuations of same eharaeter and some nausea and vomiting. Stool was negative for entameba. Morphin and atropin by needle, tanalbin and bismuth by mouth.

19th. Nausea eontinued; mueh prostration; mueh tenderness over eolon; urine seant and little sleep sinee illness began. Pulse thready, 140, and temperature 100⅖ degrees. Tineture digitalis ten drops every six hours, brandy, bismuth, opium and salol ordered.

20th. General eondition improved. Thirty to forty evaeuations and little rest after morphin and atropin by needle. Temperature 97 degrees, pulse 112.

21st. Temperature 97 degrees, pulse 120. Some sleep obtained during the night, some nausea. Bulgarie aeid baeilli in large doses ordered with other measures as before. Protargol irrigations attempted, but only to aggravate symptoms. Saline irrigations had been attempted before this date, but eould not be used.

22d. Some digested matter in the stool. Patient more eomfortable. Ten to twelve evaeuations. No ehange in treatment.

23d. Temperature 98 degrees, pulse 120. Opiates eontinued as well as other measures, and urotropin ordered.

24th. Temperature 98 degrees, pulse 120. Ten to twelve evaeuations. Emetine ordered twiee daily for six days. Bismuth eontinued and opiates as required. There was a gradual improvement, but no effeet noted from the emetine. Convaleseenee began one month after onset of severe symptoms, and reeovery without a eomplieation, exeept edema of the extremities for several weeks.

THE SECOND CASE.

A. C. J., white, male, age forty-seven; foreman on dredge boat; beeame ill with dysentery three days before my visit on June 30; ehill yesterday; thirty to forty evaeuations today. Temperature 103 degrees, pulse 136. Nausea, severe reetal tenesmus and abdominal soreness. Blood was negative for plasmodia. Morphin and atropin by needle. Small doses of mereury and bismuth ordered.

On the following day: Temperature 99⅘ degrees, pulse 108. Same symptoms as the day before. Twenty to thirty evaeuations. Castor oil and large doses of bismuth ordered.

2d. Temperature 98 degrees, pulse 96. Thirty to forty evaeuations; strength improved. Magnesium sulphate, paregorie and elixir vitriol ordered, with bismuth following.

4th. More eomfortable. Pulse 100 and temperature 101 degrees. Treatment same.

5th. Pulse 112, temperature 100⅕ degrees. Stool negative for entameba. Tenalbin and bismuth ordered, with ealomel one-eighth grain night and morning.

6th. Symptoms same as preceding day. Emetine ordered for five days, with epsom salts daily. No beneficial effect noted. Bulgaric acid bacilli were given also, but no beneficial effect. Bismuth and tanalbin was continued and such general measures were used as his symptoms demanded. During the latter portion of his illness a return of fever occurred and plasmodium were found on the blood examination; quinin promptly controlled. Convalescence began about the twentieth day and patient recovered in about one month as did the previous one.

DISCUSSION.

Dr. M. L. Norwood (Lockesburg): I have listened to this very thorough paper, and have enjoyed it very much. It leaves but little ground for discussion. He has done what we shall all do when we get a case—try to find out what is the matter by all the diagnostic means within our power. Of course, when we have a case of dysentery, and we have the usual classical clinical symptoms like tenesmus, pain, frequent bloody stools, we know we have dysentery, but what form, whether bacillary or entamebic.

As for the treatment of the bacillary form, the essayist says nothing did any good, I believe, except the opium treatment. There is a serum treatment for the bacillary dysentery with which I have had no experience. I don't know a thing in the world about it. As to whether ipecac does any good in these cases, I am not prepared to say. Sometimes I thought it did, and sometimes I didn't think it did. But, if we leave opiates out of the treatment of the bacillary form of dysentery, I would not want to treat any; I wouldn't want anybody to treat me if they didn't give me some opiate. We have a class of practitioners now that don't believe in giving opiates for anything, but I certainly would not permit a patient of mine to suffer with the tortures of bacillary dysentery without opium.

As for the treatment of the entamebic form, he said that emetine is a specific and that he had no relapse in his cases. I have recently reviewed the literature upon that point, and emetine will cure them, but they don't all stay cured. A certain amount of relapses have occurred and will continue to occur. The writers upon this subject have not had sufficient time yet in which to report a great many cases, that have occurred. Rogers, in 1912, first began the use of emetine. Allen, of New Orleans, reviewed some twenty-three articles on this subject to find out how long they stayed cured before any relapse. Lyons, of New Orleans, has perhaps done more investigation work in the last few years than any other man on that subject, and, out of seven cases that he reported in detail, emetine acted as a specific in six of his seven cases. One case proved fatal; however, it was moribund when it was under treatment. There are some dangers in the use of this emetine treatment, because it frequently causes an increase in the number of stools and produces a toxic condition, and we think that the dysentery is getting worse and want to increase the dose to control it, and we are really getting the effect of the emetine. Another effect of emetine is that after the drug has been suspended for several days, a toxic effect is likely to appear; after it has been suspended for some four or five days. Another man reports some cases of entamebic dysentery that he could not cure with emetine or the ipecac. So he tried a combined method by putting his pulverized ipecac into capsules that had been soaked for a number of hours in a 20 per cent formaldehyde solution, and giving by the mouth, and the emetine hypodermically, and in this way he controlled one case that absolutely refused to yield to any other form of treatment.

The Journal of the A. M. A. of April 22 of this year reports the first fatality from the use of emetine. It was a case in the Johns Hopkins clinic, diagnosed as amebic dysentery and syphilis. He was treated for twenty days by giving twenty-nine grains of emetine, a grain and a half per day. The patient got worse, and continued worse for five days afterward. He soon developed a kidney lesion, then pneumonia and dyspnea and death.

We are told we should look for the symptoms from the toxic effect of emetine as increased diarrhea, albuminuria, and in the end peripheral neuritis.

I want to thank the doctor for his very thorough paper.

Dr. A. F. Hoge (Fort Smith): I think the cases have been presented in an ideal manner. There is one point that the doctor did not emphasize sufficiently in my mind, and that is that these cases should be controlled for a number of months after an apparent cure, and stool examinations made from time to time to be sure that the ameba have all been destroyed and eradicated. Amebic dysentery is a treacherous disease. You can never tell whether we have a new infection, or whether it is a recrudescence or recurrence of an old infection. For that reason these cases should be controlled by frequent stool examinations for some period of time after an apparent cure.

I had a series of cases some years ago when I was in tropical work, that showed the necessity of that. And, it is well worth while to control these cases by frequent and adequate examinations.

The history of ipecac in the treatment of dysentery is very interesting. It dates back to the East Indian physicians almost a century ago, possibly longer, and it is strange indeed that until recently, in 1912, it remained for Rogers to isolate the active principle of emetine, the active principle which is responsible for the specific action that ipecac has.

Dr. John B. Murphy, of Chicago, relates that in his early youth, when he was associated with Dr. Lee, ipecac was just coming into notice in this country, and that Lee came in one morning and said, "Murphy, do you use ipecac in diarrhea trouble we are having over on this side?" Murphy told him no, he hadn't been using it. He said, "I have used it, and I was the first discharge."

They hadn't come to the point where they were using salol coated pills, much less to the point where they were using emetine.

Dr. Hudson (closing): I wish to thank the society for the opportunity of reading the paper, and also wish to thank the gentlemen for their discussion. Of course, this subject is so broad that it would be impossible for one, in a short paper like this, to cover the subject as it should be covered.

THE UNITED STATES PUBLIC HEALTH SERVICE ASKS

DO YOU—

Maintain a polluted well and then complain about the undertaker's bill?

Think screening is too expensive and then blame your malaria on the climate?

Insist on sanitary cigar factories and then use a public cigar cutter?

Carry a fine handkerchief and then forget to cover your mouth when you cough?

MAXILLARY SINUSITIS.*

By W. T. McCurry, M. D.,
Little Rock.

The maxillary sinus, or antrum of Highmore, has often been compared to a three-sided pyramid in shape. The temporal or posterior wall, formed by the body of the superior maxilla, is very thick. The thin orbital wall forms the roof of the sinus. The anterior walls correspond to the facial surface of the superior maxilla and over the canine fossa may only measure 2 m.m. in thickness. The base of the pyramid corresponds to the outer wall of the fossa, which is naturally convex toward the sinus. The central area of this base is very thin and in certain parts is closed only by membrane. Advantage is taken of this in exploratory puncture of the sinus. The natural opening of the sinus is found on this wall, but nearer to the roof than to the floor of the cavity. It opens into the middle meatus by the ostium maxillare at the posterior extremity of haitus semilu naris.

It is really a rounded angle lying above the alveolar of the superior maxilla. The roots of the teeth, particularly the second bi-cuspid and first molar are only separated from the cavity by a thin layer of bone. The mucoperiosteum is frequently arranged in folds or ridges.

The floor of the maxillary sinus and that of the nose may be on the same horizontal plane, but that of the sinus is generally about one-half inch lower. A large adult maxillary sinus will hold one ounce of fluid, but the cavity must be represented by a mere chink, or, more rarely, be entirely absent.

The maxillary sinus exists at birth in rudimentary form and reaches its full development about the twelfth year. The mucous lining of the maxillary sinus consists of thin, closely adherent ciliated epithelium. Little is positively known as to the function of these cavities. They have been regarded as resonating spaces for the voice, as serving for the secretion of mucous and assisting in directing the inspired air toward the olfactory region, as vestigal accessory organs of smell, or helping to diminish the weight of the bony cranium.

Suppuration may arise from direct infection of the sinus, or to some intranasal affection. Among the acute infectious diseases which give rise to sinusitis are influenza, pneumonia, measles, scarlatina, smallpox, cerebrospinal meningitis, diphtheria, erysipelas, and more rarely, glanders, mumps, gonorrhea, coryza, and all processes in the nose that are associated with pus formation, may induce empymea in the maxillary cavities.

Predisposing causes are acute rheumatism, peritonitis, contracted kidney, mercurial ptyalism, phosphorus poisoning and plumbism. The use of the galvanic-cautery in the nose, nasal douches, vomited matter, and diving into the water feet first have also been productive of sinus suppuration.

External violence, *e. g.*, falls or blows, in this region will sometimes set up a sinusitis, which may prove fatal from cerebral complications. The suppuration may be maintained or aggravated by the presence of foreign body, as when a plug or a drainage tube has accidentally slipped into the maxillary sinus through an alveolar drainage opening, or portion of gauze or cotton left in it. The greater frequency with which the maxillary sinusitis affected is due to the fact that, in addition to the aforementioned causes, it is exposed to infection arising from the teeth, either by the eruption of a root abscess into the cavity, or by a tooth stump being driven into it during an extraction. Clinical and bacteriological investigations show that from 10 to 33 per cent of the cases of antral suppuration are due to dental infection.

Malignant growths, or syphilis, in an accessory cavity will give rise to suppuration. Finally, pus from one cavity may affect another.

Most of the chronic suppurations in the sinuses result from acute attacks.

Inflammation of the sinuses is caused by bacteria, except in a few cases. The bacteria found are those that are commonly present in the buccal and nasal cavities. The researches of Stanculeanu and Baup developed that the organs of sinus suppuration might be divided into two groups. First, those of nasal origin; such usual organisms as pneumococci, streptococci and staphylococci. Second, those of dental origin were due to dental diseases and productive of fetid pus. I have found the micrococcus catarrahlis, the pneumococci, or the bacillus influenza in pure culture in cases of acute sinusitis.

This forms a part of many acute catarrhs which invade the sinuses by direct extension from a nasal coryza. Acute exacerbations are not uncommon in the course of chronic empy-

*Read before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2, 3, 4, 1916.

ema, and it rarely occurs in children under fifteen.

Acute sinusitis may be of mild type, so that there is only slight oppression or heaviness over the affected cavity with a discharge which passes unperceived, or of a severe form with external symptoms which often escape correct diagnosis.

Acute sinusitis very frequently forms a part of acute nasal coryza, the symptoms of which are very similar. Those which point to the implication of sinus during an acute "cold in the head" are (1) pain in the region of the cavity, generally described as neuralgia, and (2) tenderness on pressure. Lachrymation, photophobia, edema, slight congestion and deep-seated headache also suggest the implication of a sinus. Of course, more than one cavity may be affected at the same time. The occurrence of a rigor or a rise of temperature would indicate more than simple catarrh.

The chronic symptoms may be any of those enumerated as common to pus in an accessory cavity. If the secretion of pus is so small that it only overflows occasionally into the nasal chambers, the objective symptoms may be slight, although the patient complains of occasional neuralgia, face-ache, and so forth. In a doubtful case the patient should be examined in the morning hours, since, after midday, the sinus has often become so emptied that no pus escapes into the nose during the rest of the day. When the ostium is obstructed and when an acute exacerbation is grafted on the chronic conditions, attention is directed to the affected sinus by the redness, swelling and tenderness of the cheek and lower eyelid on the same side.

POSTURE TEST.

Suppose the pus does not speedily make its reappearance, the patient should bend the head well forward between the knees, with the affected side uppermost. This test, known as Fraenkel's, brings the ostium maxillare into the most dependent point of the sinus, so that, when the head is raised, and the nose again inspected, a stream of pus will be found in the middle meatus.

Relief is obtained by a discharge of mucous, which may be blood-stained of muco-purulent, or by a free gush of pus.

The occurrence of the facial neuralgia, with a discharge of pus from the nose, should always suggest a sinusitis. If the purulent flow is unilaterial it adds to the probability. Since many patients with acute sinusitis are seen in bed, the discharge, if any, flows backward and will only be visible in the pharynx. In the early stage there may be no pus in the nose, and in some cases resolution may take place without suppuration.

The mistake is often made of treating an acute sinusitis as a case of acute catarrh, rheumatism, or influenza; while in an aggravated form it is frequently mistaken for a primary meningitis phlegmon, or orbital cellulitis.

Conclusive evidence of a maxillary sinusitis can only be obtained by the expulsion of pus from the cavity. This is done by exploring the cavity from (1) its nasal wall, (2) the alveolar border, or (3) the canine fossa.

A puncture of the anthrum can be done under cocain and adrenalin. A pledget of cotton, or a strip of gauze soaked in a mixture of equal parts of adrenalin and 20 per cent solution cocain. A stout hollow needle, either straight or curved at the extremity, directed high up under the concavity of the inferior turbinals, at about the junction of the middle and posterior third of the nasal passage, one to one and one-half inches from the orifice of the nose; and while the patient's head is steadied with the left hand, the needle is punched through the thin antro-nasal wall in a line directed toward the outer angle of the orbit. The point of the needle is left in the sinus, and a rubber bag (such as that used for Politzering the middle ear) is attached to the proximal end, and air is pumped through the cavity. Pus and air bubbles will be seen appearing below the middle turbinal, while the foul odor of the secretion may only be too perceptible. This proceeding should be followed by spraying through the hollow needle a tepid solution of sterile normal saline fluid or boric lotion. The syringing should be done with some force, as the secretion may be very inspissated, the cavity tortuous, or the nasal opening obstructed.

The pus expelled is generally fetid and frequently flocculent. A small amount of, or even a decided turbidity, is sufficient to settle the diagnosis of empyema. When the lotion comes away clear the Politzer bag should again be connected with the exploring needle, and air freely insufflated, so as to expel any remaining liquid.

If, on the suspected side, there is a carious bicuspid or first molar tooth, or if one of these tooth-sockets is empty, the cavity may not only be explored from the alveolar border, but at the same time may be treated by initiative drainage. The removal of a diseased tooth and the drilling of the alveolar can both

be carried out under the same anesthesia, preferably that of nitrous-oxide gas. A large hand drill is employed. The drill is prevented from plunging in too far by the operator's thumb being steadied about an inch from the extremity.

As the drill is withdrawn the escape of pus will often confirm the diagnosis. When the patient has recovered from the anesthesia the lotion and air should be sent through the cavity, as already described, and rubber tube inserted to maintain drainage.

The indications are to facilitate the discharge and soothe the pain. The principles of treatment are: (1) rest in bed, (2) with very warm, moist compresses on the forehead or affected cheek, (3) nasal inhalations of mentholized steam for five or six minutes every hour, (4) antiseptic gargles, (5) anodynes, and, in the sub-acute stage, (6) use warm nose lotions. The nasal douche during the acute stage is useless, because it cannot reach the sinuses and it is dangerous, too, as it may wash the pus into the other cavities or the middle ear.

A few doses of antipyrin, phenacetin, aspirin, chloral hydrate or morphia will secure relief. A spray of adrenalin or cocain will reduce the conjected turbinals and facilitate discharge. If the maxillary sinus is affected, any carious or suspicious teeth should at once be dealt with. As soon as free secretions takes place it can be encouraged by the usual methods; otherwise the treatment should be that of the accompanying coryza.

DISCUSSION.

Dr. W. A. Snodgrass (Little Rock): I hate to see this paper go without discussion. I take issue with Dr. McCurry on one point, and that is recommending the opening of the sinus through the mouth, either by extraction of a tooth or drilling through the alveolar process. During the last two years I have had two patients under my observation who have had this operation, performed in this way, one by a dentist and the other by a neighboring physician. One of the patients lost all of the teeth on that side. The maxillary sinus is necrosed, the walls of it broken down, the most horrible condition I ever saw. I have seen a number of cases of sinusitis of the maxillary sinus opened through the nose a long time in healing up, but have never seen anything so difficult to do anything with as the cases I have treated who had been opened through the month, when necrosis of the jaw followed the infection.

Necrosed bone, when constantly bathed in saliva, has no tendency to form a line of demarcation or heal. I believe a great many of these cases of sinusitis are diagnosed erroneously as facial neuralgia or toothache. Do not open the maxillary sinus through the mouth, even if the teeth are loose; they may all tighten after the inflammation subsides.

Dr. J. S. Rinehart (Camden): I want to say that I enjoyed that paper very much. It is very common; especially during an epidemic of la grippe, the sinus becomes infected. I would like for this essayist to tell us his experience with stock or autogenous vaccines in treating these cases and what has been the result of such experience.

Dr. H. Moulton (Fort Smith): I have had an experience that covers different kinds of operations. I have done these operations, opening the sinus through the alveolar process, through the canine fossa and through the nose. Well, now, I never had such bad results as Dr. Snodgrass states, but of late years I prefer, where I can, to get in through the nose. If you have a bad tooth, and the trouble seems to be due to a diseased tooth, there is no objection to removing the bad tooth and draining through the alveolar process. It is a recognized procedure, and you should not have extensive necrosis simply from the operation of draining that way, unless there is some complicated osteitis producing it. I have never seen any such results as he speaks of following that operation of draining through the alveolar process. Of course, if you have sound teeth on that side, I think it is bad surgery to drain that way, but go through the nose every time you can, because it saves the opening up of an infectious cavity into the mouth. You get stuff from the nose into the mouth and you get infection from the mouth being taken back up into the nose while patient is eating. You do not get drainage, but only get a place to wash out. You should not leave that opening in the alveolar process open, according to my way of thinking.

Dr. J. H. Buckley (Fort Smith): I did not intend to try to discuss this paper, but there is one point I want to mention. I don't think the essayist said anything about transillumination. I have learned in many cases that transillumination for diagnoses cannot be depended upon. Not a great while ago I had a case where transillumination showed a clear sinus. I treated that case for some time, believing more or less all the time that I had a maxillary infection. So, I introduced a trocar cannula under the lower turbinal into the maxillary sinus and irrigated, and the odor that met my olfactories I recognized at once; and anyone who has ever experienced the smell of that odor from an infected maxillary sinus will have no trouble whatever in recognizing the odor. It is more or less characteristic. After treating the case a while it soon got well; but the point I want to make is the unreliability of transillumination in these cases.

Dr. McCurry (closing the discussion): I have seen one case almost as severe as the one related by Dr. Snodgrass. It was a tubercular case and I had a great deal of trouble with the infection spreading from one point to another. Ordinarily I would prefer draining through the nose and keep it cleansed in that way; but where there is an empty tooth socket, or a decayed tooth, I make a counter-opening through that; not that I care to carry infection any further, but I want that tooth out of the way.

The most extensive case of sinusitis I have ever seen was one I think I showed Dr. Snodgrass; the case of a woman sent to me with each nostril filled from the anterior portion to the posterior nares, which could be seen by lifting the soft palate. There was obliteration of the whole maxillary wall, and the first and second turbinates in this breaking down was absent. We cleansed out the polypus, also the maxillary sinus on both sides, and gave her about a quart of saline solution. This treatment caused a severe hemorrhage.

In regard to the vaccines, I have not treated any of these with stock vaccines, but have had atuogenous vaccines made from patients where there was infection of la grippe origin. In some of these cases I obtained good results and in others I did not get any. That was usnally in the first part of the inflammation.

THE JOURNAL
OF THE
Arkansas Medical Society

Owned and controlled by the Arkansas Medical Society and published under the direction of the Council.

DR. WILLIAM R. BATHURST, Editor

PUBLISHED MONTHLY. Price, $1.00 a Year in Advance. Single Copies, 25 Cents.

Entered as second-class matter, June 21, 1906, at the post-office at Little Rock, Arkansas, under Act of Congress of March 3, 1879.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Address:
The Journal of the Arkansas Medical Society,
810 State Bank Building,
Little Rock, Ark.

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Editorials.

HEALTH NEWS.

It is a remarkable fact, confirmed by many observations, that many physicians who have devoted considerable labor to the study of a particular disease have themselves died of that disease. One of the most interesting examples is that of John Daniel Major, born August 16, 1634, in Breslau, a physician and naturalist of no mean ability. Bitten early by the wanderlust, he studied in Wittenburg, took courses at many of the schools in Germany, and finally went to Italy, where he received the degree of doctor of medicine at Padua in 1660. Returning to his own country, he resided for a short time in Silesia, and in 1661 married at Wittenburg, Margaret Dorothy, a daughter of the celebrated Sennert. The following year his young wife was stricken with plague and died after an illness of eight days. Distracted by his loss, Major wandered up and down Europe studying plague wherever he found it, in the hope that he might discover a cure for the disease which had bereaved him. Spain, Germany, France and Russia were visited by him. He settled in 1665 in Kiel, where he was made professor of botany and the director of the botanical gardens. He made frequent voyages, however, always in quest of the remedy for plague. Finally in 1693, he was called to Stockholm to treat the queen of Charles the Eleventh, then ill with plague. But before he could render her any service, he contracted the disease and died on the third of August.

The bubonic plague of today is identical with the black death of the Middle Ages. Primarily a disease of rodents caused by a short, dumb-bell shaped microscopic vegetable, the pest bacillus, it occurs in man in three forms; the pneumonic, which has a death rate of almost 100 per cent; the septicæmic, which is nearly as fatal, and the bubonic, in which even with the most modern methods of treatment the mortality is about 50 per cent. It is a disease of commerce, spreading around the globe in the body of the ship-borne rat. It is estimated that every case of human plague costs the municipality in which it occurs at least $7,500.00. This does not take into account the enormous loss due to disastrous quarantines and the commercial paralysis which the fear of the disease so frequently produces.

The disease is now treated by a serum discovered through the genius of Yersin. This is used in much the same way as is diphtheria antitoxin.

Plague is transferred from the sick rodent to the well man by fleas. The sick rat has enormous numbers of plague bacilli in its blood. The blood is taken by the flea, which, leaving the sick rat, seeks refuge and sustenance on the body of a human being to whom it transfers the infection.

Since plague is a disease of rodents, and since it is carried from sick rodents to well men by rodent fleas, safety from the disease lies in the exclusion of rodents, not only exclusion from the habitation of man, but also from the ports and cities of the world. Those who dwell in rat-proof surroundings take no plague. Not only should man dwell in rat-proof surroundings, but he should also live in rat-free surroundings. The day is past when the rodent served a useful purpose as the unpaid city scavenger. Rats will not come where there is no food for them. Municipal cleanliness may be regarded as a partial insurance against plague. The prayer that no plague come nigh our dwelling is best answered, however, by rat-proofing the habitations of man. Modern sanitary science has evolved a simple and efficient weapon against the pestilence which walketh in darkness and striketh at noonday, and the U. S. Public

Health Serviee has put this knowledge into praetieal operation and thus speedily eradieated plague wherever it has appeared in the United States.

Abstracts.

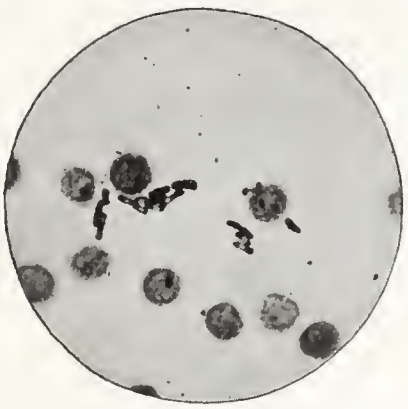
REED'S BACILLUS OF EPILEPSY.

By A. J. Hinkelmann,
Galesburg, Ill.,
Direetor Galesburg Laboratory.

(The following eonelusion is given by Dr. Hinkelmann in his artiele found in a reeent New York Medieal Journal):

In view of the faet that the organism does enter the eireulation and there multiplies into great numbers and is so generally found in the blood of epileptics, the eonclusions of Reed as to its speeifie nature beeome at least very plausible. It would be hard to eoneeive that an organism with sueh a high hæmolytie property eould enter the eireulation and multiply to sueh numbers as smear preparations

LEGEND.



Baeillus epileptieus directly in blood smear from an epileptic patient five hours after seizure.

from the blood indieate without produeing diseased eonditions within and resulting in corresponding elinieal manifestations without.

At any rate, what has already been established in regard to the organism makes the question one most worthy of serious eonsideration and extensive investigation. The universal presenee of the organism in the intestinal flora is no argument against its probable pathology, but simply adds to the importanee of the gateway through whieh it enters the blood stream, in eonsideration of the question of treatment.

If further investigation should finally establish that the baeillus epileptieus is the exeiting eause of the seizures of this disease, little probably ean be hoped for in the way of prophylaxis or eure through efforts to prevent the organism from entering the intestinal traet or to eradieate it when present. The best attention probably will have to be direeted toward those lesions whieh open the way for it from the intestines into the eireulation.

HEALTH INSURANCE.

I. M. Rubinow, New York (Journal A. M. A., September 30, 1916), gives the arguments in favor of industrial health insurance. Though he admits there are other elasses to whieh the benefits might apply, he eonfines his argument mainly to the needs of the wage-worker. The health-preserving effeet of the money gives a better ehanee for reeovery. It needs no showing that reeovery is seriously interfered with under eonditions of poverty and worry, and the bare amount that is often given by trades union funds, ete., is not suffieient. Equally important for its eurative effeets and prevention of relapses is the ehanee gained to stay away from work when the physieian advises rest. The administrative offieers of the workmen's soeieties do not suffieiently provide for this. The proper organization of medieal aid provided for under the health insuranee plan inereases its effeetiveness and aids in other ways. It ean be so arranged as to provide for teamwork among the physieians and plaeing within the workman's reaeh the ealling in of speeialists. The broader meaning of the term "soeial insuranee" as eompared with "workingmen's insuranee" would also inelude the workman's family and children, who also need the benefit of organized eare for health if the general improvement of health eonditions is the aim. The problem of the wage-working mother is also to be considered, mortality statisties are neeessarily prerequisite to any seientifie effort to reduee mortality, and siekness statisties are equally neeessary for the improvement of health eonditions. The employer feels the new eeonomic pressure, but under a proper health insuranee seheme the burden, of eourse, should be distributed between employer, employe and the state. The Ameriean wage-working elass has not yet been edueated to the neeessity of eompulsory health insuranee, and even those who have seen its importanee view it largely from the narrow point of view of immediate finaneial aid. The willing eo-operation of the medieal profession is essential if the best results are to be obtained.

Selected Articles.

REMARKS OF DR. J. G. EBERLE IN UNVEILING THE MEMORIAL TABLET TO THE LATE DR. JOHN S. SHIBLEY AT THE ARKANSAS TUBERCULOSIS SANATORIUM, SEPTEMBER 19, 1916.

Mr. Superintendent, Ladies and Gentlemen:

It is a sad yet pleasant duty to appear before you today to pay tribute to our late friend, Dr. John S. Shibley. Few better men than he have lived to grace this earth, and though departed, his good deeds live on. His life was devoted to the betterment of mankind; a true Christian, he put in daily practice the teaching of the Master; a high-toned, courteous gentleman; a dignified, ethical physician; an upright citizen and one who took an active interest in public affairs; a close student of medicine; a man with a big heart overflowing with charity for his fellow-man, such was John S. Shibley.

It was my pleasure to live and practice in the same town with him for a year and a half, and our relations, both in social life and in consultation, were always the most pleasant.

Dr. Shibley spent the active years of his professional life in this county, having practiced for many years at Paris before coming here to assume the duties of superintendent of the sanatorium, and though not connected with it at the time of his death, it bore in his heart the place of a beloved child. He had no children of his own, although he reared and educated several orphan children; but nothing was dearer to him than the success of this sanatorium.

It is eminently proper, too, that these exercises today should be under the auspices of the Tenth Councilor District Medical Society, for it was in a meeting of this society that the movement for the establishment of this institution had its inception.

Some months ago in clearing my desk of an accumulation of old letters, I found a personal letter from Dr. Shibley inviting me to be present at the dedication of this sanatorium, September 1, 1910. In this letter this sentence occurs: "It will be especially fitting for you as prime mover to honor the occasion with your presence." In this Dr. Shibley did me undue honor, for he it was who was the prime mover. He placed the ball in position and I, together with Dr. Southard, the late Dr. Amis and one or two others, gave it the push that set it in motion.

The circumstances were as follows: At the meeting of the Tenth Councilor District Medical Society, held in Fort Smith March 20, 1907, it was my privilege as chairman of the Committee of the Arrangements, to deliver a short address of welcome, which was responded to by Dr. Shibley in a rather lengthy, well-prepared paper on the subject of the needs of this state for the establishment of a sanatorium for the treatment of tuberculosis patients. The seed was sown in good ground and after some discussion by the members above mentioned, as to the best course to pursue, a motion was adopted requesting the State Medical Society to memorialize the state legislature to appropriate the necessary funds for such hospital.

Dr. Shibley laid the question before the State Society at its following meeting, receiving its hearty endorsement and co-operation, and at the next meeting of the legislature, with the powerful aid of Judge Joseph M. Hill, the president of your Board of Trustees, Honorable Kie Oldham, a member of the legislature from Pulaski County, Drs. Southard and Meriwether, also of your Board of Trustees, and others, a bill was passed and an appropriation made providing for the sanatorium. For once Arkansas promptly wheeled into line in the march of progress and philanthropy.

Dr. Shibley took a leading part in the location and erection of the sanatorium and this splendid institution, with its beautiful site, stands as his monument.

The good it has already done in the few years of its existence is difficult of calculation and the good it will do in the future is beyond the ken of man.

As its first superintendent he gave his time and energetic mind to the proper equipment and operation of the hospital, and if any mistakes were made they were of the head and not the heart.

After the death of Dr. Shibley the Arkansas Medical Society appointed a committee composed of Dr. L. P. Gibson of Little Rock as chairman, Drs. J. G. Eberle and A. E. Hardin of Fort Smith, and Drs. Frank Vinsonhaler and M. D. Ogden of Little Rock, to erect a suitable memorial to him at the sanatorium. The result of this work is before you today, and in behalf of the committee and the State Medical Society I present this tablet in commemoration of their high regard for a true physician, their high appreciation of a noble man.—*Sanatorium Outlook.*

Personals and News Items.

Dr. C. C. Reed of Little Rock has moved to Farrell.

Dr. T. E. Hodges of Rogers has moved to Lincoln.

Dr. B. V. Powell of Reader has moved to Camden.

Dr. W. L. Hartsell of Warren has returned from Chicago and Rochester.

Dr. Albert Neisser of Breslau, Germany, the famous dermatologist, died in Berlin, July 31.

Dr. and Mrs. Anderson Watkins of Little Rock have returned from Chicago and Rochester.

Dr. and Mrs. J. P. Runyan, Dr. and Mrs. A. G. McGill and family, and Dr. H. H. Kirby have returned from a ten-day trip to St. Paul and Rochester.

The thirteenth annual meeting of the Tri-State Medical Society of Arkansas, Louisiana and Texas will be held at Texarkana, December 19-20.

Physicians visiting in Little Rock during the past month include: J. W. John, Pine Bluff; T. J. Stout, Brinkley; S. A. Southall, Lonoke; W. H. L. Woodyard, Judsonia; W. R. Brewer, Ola, and Wm. T. Fike, Warren.

The following officers were elected at the eleventh annual convention of the Medical Association of the Southwest, October 3, at Fort Smith: Dr. E. S. Lain, Oklahoma City, president; Dr. H. L. Snyder, Winfield, Kan.; Dr. J. H. Thompson, Kansas City, Mo.; Dr. M. M. Smith, Dallas, Tex.; Dr. Charles S. Holt, Fort Smith, vice presidents; Dr. F. H. Clark, El Reno, Okla., secretary-treasurer. Kansas City was selected as the meeting place for 1917.

DEATH RATES IN THE REGISTRATION AREA OF THE UNITED STATES IN 1915.

A preliminary statement just made public by Director Sam L. Rogers of the Bureau of the Census, Department of Commerce, and prepared under the supervision of Mr. Richard C. Lappin, chief statistician for vital statistics, shows a death rate of 13.5—the lowest on record—per 1,000 estimated population of the registration area of the United States in 1915. This rate was based on 909,155 deaths returned from twenty-five states (in one of which, North Carolina, only municipalities of 1,000 population and over in 1910 were included), the District of Columbia, and forty-one cities in nonregistration states, the total population of this area in 1915 being estimated at 67,337,000, or 67.1 per cent of the total estimated population of the United States.

There is a widespread and increasing interest throughout the country in respect to vital statistics. The states of North and South Carolina, which recently enacted the "model law" for the registration of births and deaths, were admitted to the death registration area for 1916, increasing the estimated population of the area to 70.2 per cent of the total for the United States in that year.

THE SOUTHERN MEDICAL ASSOCIATION MEETING, ATLANTA, NOVEMBER 13-16, 1916.

The Southern Medical Association will meet in Atlanta, Ga., Monday, Tuesday, Wednesday and Thursday, November 13-16, 1916.

The outstanding feature of the meeting will be the clinics every morning from 8 to 10 by visiting clinicians, men from different Southern cities. The medical college and the large city hospital offer great opportunities for the successful carrying out of this idea.

Monday the railway surgeons, Public Health Section and the conference on medical education will be in session. Monday evening, public meeting with addresses by prominent health workers. Tuesday night, a reception at the Capital City Club. Wednesday a "Georgia barbecue" at the Druid Hills Country Club. This club has fine golf links and those who wish to golf will have the privilege that afternoon. There will also be a golf tournament on Friday.

The section programs were never better; they offer a scientific treat. All the scientific sessions will be held under one roof, that great auditorium-armory, of which Atlanta is so justly proud. This is an ideal arrangement. Nothing is being omitted that can be done for the pleasure of the guests at this meeting. An attendance of two thousand is predicted. Texas alone is arranging for special trains bringing more than 250. Arkansas should be well represented. Will you be there?

HALF A CENTURY'S PROGRESS.

October, 1916, points an epoch in the history of Parke, Davis & Co. The house was founded in 1866—just fifty years ago this month—largely upon the optimism of three or four determined men, backed by a capital that

would seem insignificant today. There was nothing in its unpretentious origin to foretell the success of after years. And by success we mean not merely material prosperity, but also that broader and more enduring success that is based upon good will and confidence.

Manufacturing pharmacy was then a crude, imperfect art. Bacteriology, pharmacology and biological pharmacy were as yet unborn. There were no curative sera or vaccines in those days. Prophylaxis was in its infancy. Standardization was unknown.

Fifty years have wrought marvelous changes in means and methods for the treatment of human ills. The materia medica has been amplified beyond the dreams of the earlier investigators. Knowledge of pathology has immensely broadened. The empiricism of the past has given way to rational therapeutics, and medicine is taking its rightful place among the sciences.

In all these forward movements Parke, Davis & Co. have had some part—notably as discoverers of new vegetable drugs, as inventors of new chemical compounds, as pathfinders and producers in the field of biological manufacture, as investigators in original research, as pioneers in both chemical and physiological standardization.

The past half century, as we have intimated, has been remarkable in its contribution to the newer materia medica. What will the next fifty years bring forward? Time alone can write the answer. Ours is a progressive age. The science of medicine has not reached its highest development. The physician's armamentarium will be further enlarged and fortified. New remedial agents will come into being. Many existing products will be improved. And with the fulfillment of these conditions, Parke, Davis & Co. (if we may judge the future by the past) are certain to be identified.

FOR SALE—House and Practice for Sale.—Three-acre lot, four-room house, summer dining room and kitchen, 72 feet of porches, good well of fine water on back porch, good garden, 75 fruit trees, peaches, apples, plums and pears, been set two years. Fine cellar under building, good barn and outbuildings; no competition, $2,000.00 practice: collections 75 per cent. Will sell for $1,000.00; worth $1,500.00. Address, Floyd Cope, M. D., Nimrod, Ark.

(Advertisement.)

New and Nonofficial Remedies.

Benzidine-Merck (For Blood Test).—This complies with the standards prescribed for benzidine, N. N. R. Merck & Co., New York (Journal A. M. A., September 16, 1916, p. 879).

Thromboplastin—Squibb.—A solution of brain extract complying with the standards for solution brain extract, N. N. R. It is marketed in 20 c.c. vials. E. R. Squibb & Sons, New York (Journal A. M. A., September 23, 1916, p. 953).

Benzidine.—In medical practice benzidine is used for the detection of occult blood. In the presence of hydrogen peroxid and acetic acid, benzidine is changed to a deep purple compound by the action of blood. The test is said to detect blood in a dilution of 1 in 300,000.

Mercurial Oil—National Pathological Laboratory.—A mixture of equal weights of mercury and lanolin obtained by triturating the constituents until mercury globules are no longer macroscopically visible. It is marketed in graduated syringes ready for use and containing 2 c.c. National Pathological Laboratories, Chicago (Journal A. M. A., September 23, 1916, p. 953).

Solution of Hypophysis (Squibb).—A sterilized, aqueous solution of the water-soluble active principles of the posterior lobe of the pituitary bodies of cattle, free from chemical preservatives and physiologically standardized. It has the properties of the pituitary gland, as described in New and Nonofficial Remedies, 1916. E. R. Squibb & Sons, New York (Journal A. M. A., September 2, 1916, p. 745).

Liquid Petrolatum—Squibb, Heavy (Californian).—It is made from Californian petroleum and is claimed to be composed chiefly of hydrocarbons of the naphthene series. A brand of liquid petrolatum complying with the U. S. P. standards for liquid petrolatum and claimed to be superior to liquid petrolatum, U. S. P. E. R. Squibb & Sons, New York (Journal A. M. A., September 23, 1916, p. 953).

Mercurial Oil.—A mixture containing from 40 to 50 per cent of metallic mercury in an oily base. The mercury is in a finely

divided state and of a consistence which permits its intramuscular injection by means of a proper syringe at room temperature. The degree of subdivision of the mercury should be indicated for each brand of this product. Mercurial oil is used as a means of obtaining the systemic effects of mercury. Cumulative effects should be carefully watched for.

CHLORAZENE.—Chlorazene (sodium paratoluenesulphochloramine) is an active germicide acting much like hypochlorites, but being less irritating. Like the hypochlorites, it has the advantage over mercuric chlorid, zinc chlorid, etc., in that it does not coagulate or precipitate proteins, such as blood serum. Chlorazene is reported to be practically nontoxic. The Abbott Laboratories, Chicago, Ill. (Journal A. M. A., September 30, 1916, p. 1021).

OCCULT BLOOD TEST (DUDLEY ROBERTS).—This consists of tablets each containing 5 grains of a trituration of benzidine, 1 part, and sodium perborate, 20 parts, and glacial acetic acid (supplied in boxes containing 100 tablets in vials, and a bottle of glacial acetic acid). A tablet is treated with a weak solution of the material to be tested and a drop of acetic acid added; a greenish blue color indicates the presence of blood. E. R. Squibb & Sons, New York (Journal A. M. A., September 16, 1916, p. 879).

Propaganda for Reform.

GLYCO-THYMOLINE AND POLIOMYELITIS.—The manufacturers of Glyco-Thymoline are circularizing physicians, advising dependence on Glyco-Thymoline as a preventive against poliomyelitis. A report of the Council on Pharmacy and Chemistry pointed out that this preparation is simply a weak antiseptic, so feeble that even in full strength it does not kill *staphylococcus aureus* in four hours, and is of little, if any, greater therapeutic value than sterile salt solution (Journal A. M. A., September 16, 1916, p. 895).

NAPHTHALENE FOR AUTOMOBILES.—The A. M. A. Chemical Laboratory reports that "Inajiffi" tablets are pure, or nearly pure naphthalene. The tablets are to be added to gasoline for automobiles, etc. The increase of energy produced by the addition of the tablets is probably too slight to be appreciable. Even if the addition of the small quantity advised by the dealers of "Inajiffi" did give an appreciable augmentation of energy, naphthalene might be bought in the form of moth balls (Journal A. M. A., September 16, 1916, p. 897).

BI-TARIDE TABLETS.—These are dark brown tablets with a strong tarry odor, sold by the Germicidal Products Corporation, New York. The Council on Pharmacy and Chemistry reports that the preparation was found ineligible for New and Nonofficial Remedies because the composition of the tablets is essentially secret, because the therapeutic claims made are exaggerated and an invitation to the public to depend on them in serious diseases, and that the combination of coal tar derivatives and boric acid (said to be constituents of the tablets) is irrational (Journal A. M. A., September 16, 1916, p. 895).

SULFURYL MONAL.—According to the label, these "pastilles" contain "sulfuryl (combined polysulphurets)" which "liberates nascent sulphuretted hydrogen." The A. M. A. Chemical Laboratory reports that the tablets had the taste of licorice extract, an odor of hydrogen sulphide, and that a tablet liberated about 6 c.c. hydrogen sulphide. The Council on Pharmacy and Chemistry reports that sulphides are practically ignored in modern textbooks and declared Sulfuryl Monal ineligible for New and Nonofficial Remedies because unwarranted and dangerous therapeutic claims were made for it (Journal A. M. A., September 16, 1916, p. 894).

ARSENOBENZOL AND DIARSENOL.—The Council on Pharmacy and Chemistry reports that it found Arsenobenzol, made by the Dermatological Research Laboratories, Philadelphia Polyclinic, Philadelphia, and Diarsenol, made by the Synthetic Drug Company, Toronto, Canada, substantially identical with salvarsan in composition, and equal to salvarsan in therapeutic efficiency. The council reports that these products have not been admitted to New and Nonofficial Remedies because there is a doubt as to the legality of their sale in the United States. But for this doubt as to their legal status, both products would be entirely eligible to N. N. R. (Journal A. M. A., September 16, 1916, p. 879).

SECRETOGEN.—The Council on Pharmacy and Chemistry has reported that commercial secretin preparations examined (Secretogen and Duodenin) contained no secretin, and also that secretin is inert when given by mouth. While practically admitting the correctness

of the council's findings, the manufacturer of Secretogen (the G. W. Carnrick Co.) in a letter to the council sets forth the company's claims for secretogen on a new and altogether improbable basis. Since the arguments are purely speculative, the council reaffirms its previous action declaring this preparation ineligible for New and Nonofficial Remedies (Journal A. M. A., September 9, 1916, p. 828).

Pulvoids Calcylates.—The Drug Products Co., Inc., New York, markets tablets under the name "Pulvoids Calcylates, 5 gr.," with claims as to composition, which, though vague, suggest that the product is a mixture of calcium salicylate and strontium salicylate. The Council on Pharmacy and Chemistry found that there was no evidence that a mixture of the salicylates of calcium and strontium is superior to sodium salicylate, and declared Pulvoids Calcylates ineligible for New and Nonofficial Remedies because unwarranted therapeutic claims were made for the mixture, because the name does not describe the composition, and because the mixture is an unessential modification of an established remedy (sodium salicylate) (Journal A. M. A., September 9, 1916, p. 827).

The U. S. Pharmacopoeia, IX.—The ninth revision of the U. S. Pharmacopœia became official September 1, 1916. It is a book of standards for drugs, but it is not a book of standard drugs. The pharmacopœia includes substances which have been shown to be inert like the hypophosphites, complex and obsolete mixtures like the compound syrup of sarsaparilla, and drugs which have been tried and found wanting like saw palmetto berries. There is one great advantage in specifying U. S. P. preparations; to do so is to invoke legal standards of identity and purity. The only way to be sure of obtaining substances of therapeutic efficiency, however, is to exercise discrimination; the pharmacopœia is no guide to therapeutically valuable drugs (Journal A. M. A., September 2, 1916, p. 750).

Mark White Goiter Treatment.—The Council on Pharmacy and Chemistry reports that Mark White Goiter Serum and Mark White Iodinized Oil, submitted by the Mark White Goiter Serum Laboratories, Chicago, was not admitted to New and Nonofficial Remedies because the sale in interstate commerce of the "serum" has not been authorized by the Treasury Department, because the statements regarding composition are indefinite and contradictory, because the therapeutic claims were not substantiated, and because the routine treatment of goiter is irrational. Mark White is a veterinarian, and, in association with various physicians, has exploited his treatment, at one time called "Goiterine," from different cities. In Chicago he has been associated with Dr. Rachel Watkins (Journal A. M. A., September 23, 1916, p. 967).

Kora-Konia.—Kora-Konia is a dusting powder advertised to the medical profession by the "House of Mennen." It is claimed to be indicated in the treatment of acne, dermatitis, eczema, intertrigo, etc., and is said to possess germicidal qualities. The A. M. A. Chemical Laboratory reported that the powder essentially consists of talcum and zinc stearate in about equal proportions to which small quantities of magnesium carbonate and boric acid have been added. The Council on Pharmacy and Chemistry believes that the extravagant and unwarranted therapeutic claims made for this simple dusting powder are likely to lead the public, as well as the thoughtless physician, to place unwarranted confidence in it, and therefore declared Kora-Konia ineligible for New and Nonofficial Remedies (Journal A. M. A., September 30, 1916, p. 1034).

The Therapeutic Value of the Glycerophosphates.—In view of the very convincing evidence that the glycerophosphates do not possess the therapeutic properties attributed to them and are not superior to ordinary phosphates, the Council on Pharmacy and Chemistry examined the following proprietary glycerophosphate preparations: Tonols (Schering and Glatz) comprising Iron, Lime, Lithium, Magnesium, Manganese, Potassium, Quinin, Sodium, and Strychnin "Tonols," Duotonol Tablets, Triotonol Tablets, Quartonol Tablets, Sextonol Tablets, Phosphorcin Compound (Eimer and Amend), Robinol (John Wyeth & Bro.), Phosphoglycerate of Lime (Fougera & Co.), Elixir Glycerophosphates, Nux Vomica and Damiana (Sharp and Dohme). The council reports that unwarranted therapeutic claims are made for all of these preparations. In addition, the composition of Robinol and Elixir Glycerophosphate, Nux Vomica and Damiana is semisecret, and Tonols, Phosphorcin Compound and Robinol bear objectionable names (Journal A. M. A., September 30, 1916, p. 1033).

The New National Formulary.—The National Formulary, fourth edition, becomes offi-

cial September 1. It is published by the American Pharmaceutical Association. The preface says frankly: "The scope of the present National Formulary is the same as in previous issues, and is based on medical usage rather than on therapeutic ideals. The committee consists entirely of pharmacists, or of men with a pharmaceutical training, and it cannot presume either to judge therapeutic practice or follow any particular school of therapeutic practice. The question of the addition or deletion of any formula was judged on the basis of its use by physicians and its pharmaceutical soundness. The considerable use by physicians of any preparation was considered sufficient warrant for the inclusion of its formula in the book, and a negligible or diminishing use as justifying its exclusion." The National Formulary contains a large number of formulas for preparations which in the main are complex and superfluous. From the pharmacist's point of view, the book is a valuable one. Physicians who have a scientific training in the pharmacology of drugs will not want it; others will be better off without the temptations offered by its many irrational formulas (Journal A. M. A., September 2, 1916, p. 764).

The Hypophosphite Fallacy.—The Council on Pharmacy and Chemistry reports that the introduction of hypophosphites into medicine was due to an erroneous and now discarded theory as to the cause of tuberculosis and the properties of the hypophosphites. After a review of the literature and in view of experimental work, the council concludes that there is no warrant for the use of hypophosphites in medicine, unless it is to secure the calcium effect from calcium hypophosphites and the ammonium action of ammonium hypophosphites. The council reviews the claims made for the following and declares them ineligible for New and Nonofficial Remedies: Fellows' Syrup of Hypophosphites, Fellows Medical Mfg. Co.; Syrupus Roborans (syrup hypophosphites comp. with quinin, strychnin and manganese), Arthur Peter & Co.; Schlotterbeck's Solution Hypophosphites of Lime and Soda (liq. hypophosphitum, Schlotterbeck's), the Schlotterbeck & Foss Co.; Robinson's Hypophosphites, Robinson-Pettet Co.; Eupeptic Hypophosphites, Nelson, Baker & Co.; McArthur's Syrup of the Hypophosphites Comp. (lime and soda), the McArthur Hypophosphite Co. Though in general no therapeutic claims, so far as the hypophosphites are concerned, are made for the following, the council held their use irrational and directed their omission from New and Nonofficial Remedies which now describes them: Borcherdt's Malt Olive with Hypophosphites, Maltzyme with Hypophosphites, Maltine with Hypophosphites, and Maltine with Olive Oil and Hypophosphites (Journal A. M. A., September 2, 1916, p. 760).

County Societies.

PULASKI COUNTY.

(Reported by Dr. Geo. B. Fletcher, Sec'y.)

Regular Meeting September 18, 1916.

This meeting was set aside for the purpose of meeting the Hospital Committee of the City Council and discussing the proposed campaign for a new City Hospital. The following members and visitors were present: Drs. Carmichael, Murphy, Robinson, Pettus, Falisi, Bailey, Caldwell, Shipp, Stover, Doyne, McCaskill, Johnston, Meriwether, Bathurst, Hudson, Vaughan, Kirby, Lee, Fletcher, Holiman, Strauss, Judd, Reagan, Campbell, Scarborough, Dooley, Jobe, Smiley, Ogden, May, Miller, Scott, Snodgrass, Gibson, Day, Runyan, Zell, Meek, Saxon, Wilkes, and Messrs. Clio Harper, Will Mitchell, Dan Daniels, Lynch and McCain.

No scientific program was held. Mr. Lynch briefly outlined the plan of campaign, which will extend over a period of ten days. An attempt will be made to raise $200,000.00, which amount is thought to be sufficient to build a hospital of from 100 to 125 beds. Mr. Dan Daniels, chairman of the Hospital Committee of the City Council, told of one man who had offered to donate $20,000.00 cash and another who will donate a block on High Street valued at $12,000.00.

Dr. Milton Vaughan referred to the need of a larger and better hospital for the care of the sick poor.

Mr. Will Mitchell stated that the movement has the support of the city officials and the administration.

Mr. Henry C. McCain asked for the unqualified endorsement of the society.

Dr. Dooley expressed his interest in the matter and gave his views as to the formation of the staff. Dr. Meriwether recommended a rotating staff.

Dr. L. P. Gibson reviewed the history of the care of the sick poor and mentioned the fact that the city has never aided the doctor in his work. He also asked that antagonism and personal matters be left out of the movement and advised that the society co-operate in every way with the committee of the City Council, thereby not hindering the enterprise by internal strife.

A motion by Dr. Miller, seconded by Dr. McCaskill, that the society express to the committee its unqualified endorsement of the plan, was carried by a unanimous rising vote.

A motion by Dr. Snodgrass, seconded by Dr. Stover, that a committee of five be appointed to act in conjunction with the City Council committee, carried, and the following were appointed: Drs. Caldwell, Runyan, Bathurst, Miller and Pettus.

The application of Dr. Wm. A. Dashiel was voted upon and he was unanimously elected to membership.

The meeting, on motion, adjourned at 9:30 p. m.

Regular Meeting October 2, 1916.

Pulaski County Medical Society was called to order in regular session at 8:20 p. m. by Dr. A. L. Carmichael, the president being absent.

The minutes of the previous meeting were read and approved.

The following members were present: Drs. Carmichael, Ogden, Murphy, Scarborough, Judd, Doyne, Saxon, Hudson, McCurry, Gibson, Hankison, Zell, Harris, Bond, Dooley, Day, Johnston and Fletcher.

No clinical cases were reported.

Dr. A. E. Harris, the essayist for the evening, then read a very timely and interesting paper entitled "Local Tubercular Problems," which was discussed by Drs. Dooley and Gibson.

A motion by Dr. Gibson, seconded by Dr. Judd, that a committee of five members of this society be appointed, with Dr. Harris as chairman, to work for the establishment of a county tubercular sanatorium, was carried, and the following were appointed as members of this committee: Drs. Harris, Gibson, Scarborough, Zell and J. G. Watkins.

Dr. Ogden, chairman of the Library Committee, reported that three sets of book cases had arrived and that the librarian had almost finished catalogueing the volumes. Our next move would be the purchase of a filing cabinet. The president authorized the committee to purchase the cabinet.

A letter from the Arkansas Child Welfare Association was read, asking that a committee be appointed to confer with them for the purpose of determining what doctors will assist in the baby health contest to be held at the Pulaski County Fair, October 21.

Dr. Ogden moved that the committee be appointed. Being seconded by Dr. Murphy, the motion was carried. The chair appointed Drs. Murphy, Doyne and Judd.

The transfer of Dr. G. D. Thompson was referred to the Committee on Credentials.

The meeting, on motion, adjourned at 9:20 p. m.

ASHLEY COUNTY.

(Reported by Dr. J. C. Simpson, Sec'y.)

The Ashley County Medical Society met in Hamburg September 6. Members present: Drs. L. C. Barnes, H. E. Cockerham, W. S. Norman, W. H. Shipman, J. W. Simpson and J. C. Simpson. Dr. Castile, formerly of Winchester, Ark., was a vistor and took part in the discussions.

Report of transfer of Dr. E. D. Edwin, formerly of White-Ashley County, to Drew County Medical Society.

The following committee was appointed on Red Cross Medical Work: Dr. J. E. Sparks, Crossett; Dr. W. S. Norman, Hamburg; Dr. H. E. Cockerham, Portland; Dr. W. H. Shipman, Montrose; Dr. J. C. Simpson, Hamburg.

Scientific session: "Report of a Case of Swamp Fever," by Dr. H. E. Cockerham. Followed by a general discussion of the subject.

FRANKLIN COUNTY.

(Reported by Dr. Thos. Douglass, Sec'y.)

The Franklin County Medical Society had a fine meeting at Branch, September 5, Dr. Post presiding. There were sixteen doctors present: Two from Fort Smith, Drs. Holt and Southard; two from Paris, Drs. Maek Smith and Wear, Dr. E. N. Lipe from Scranton, and the rest from Franklin, namely: Benefield, Weaver, Akin, Gammill, King, Hodges, Blackburn, Warren, Williams, Post, Downey and Douglass.

Dr. Blackburn read a good paper on "Epilepsy," which brought out an interesting discussion.

Dr. C. S. Holt of Fort Smith read a good paper on "General Peritonitis," which provoked a lively discussion.

There was a public health meeting in the afternoon, which was attended by a number of people of Branch.

Dr. E. N. Lipe of Scranton delivered an excellent address on "Health Problems" and Dr. Southard of Fort Smith discussed very interestingly the same subject.

Dr. E. F. Hodges in an address of welcome showed himself quite an orator.

The doctors and citizens of Branch gave us a delicious, appetizing dinner and nearly succeeded in overfeeding us. Everyone had a most enjoyable time.

This good meeting is directly traceable to the excellent, painstaking work of the secretary of the Arkansas Medical Society, Dr. Meriwether.

Book Reviews.

THE ENDEMIC DISEASES OF THE SOUTHERN STATES.—By William H. Deadrick, M. D., and Loyd Thompson, M. D., Hot Springs, Ark. Octavo volume of 546 pages, with 117 illustrations. W. B. Saunders Company, Philadelphia, 1916. Cloth, $5.00 net; half morocco, $6.50 net.

The contents of this book is divided into the following subjects: "Malaria," "Black Water Fever," "Pellagra," "Amebic Dysentery," "Hookworm Diseases and Other Intestinal Parasites." The authors state that this book is the only work existing dealing solely with endemic diseases of the Southern states. It fills a long-felt want of the medical profession of the South.

DISEASES OF THE SKIN.—By Richard L. Sutton, M. D., Professor of Diseases of the Skin, University of Kansas School of Medicine; former Chairman of the Dermatological Sections of the American Medical Association; member American Dermatological Association; Assistant Surgeon, United States Navy, retired; Dermatologist to the Christian Church Hospital. With 693 illustrations and eight colored plates. Price, $6.50. C. V. Mosby Company, St. Louis, Mo.

Physicians will find in this book a most excellent and comprehensive treatment of the subjects of diseases of the skin. The work is the outgrowth of many years of study by an energetic and enthusiastic student of dermatology. The author has placed particular emphasis on the pathology and treatment. Excellent illustrations are given of the commoner affections of the skin, such as eczema and syphilis; the rarer diseases have not been neglected. Several of these, such as cutaneous thrush, foot-and-mouth disease, and trichinosis, have never before been pictorially represented in any book.

1916 COLLECTED PAPERS OF THE MAYO CLINICS, Rochester, Minn. Octavo of 983 pages, 286 illustrations. W. B. Saunders Company, Philadelphia, 1916. Cloth, $6.00 net; half morocco, $7.50 net.

This volume is compiled by a list of thirty-seven contributors of the Mayo Clinics and on the Mayo Foundation, Graduate School, University of Minnesota. The table of contents divides the contributions as follows: Alimentary Canal; Uro-genital Organs; Ductless Glands; Head, Trunk and Extremities; Technic, and twelve papers listed as "General Papers." Among them we find an interesting article by William Carpenter MacCarty on "Studies in the Etiology of Cancer." Our readers, no doubt, would enjoy Dr. Charles H. Mayo's article on "Infection a Cause of Local and General Disease." He refers to the work of Rosenow who has proven conclusively that many or most of the so-called local diseases, such as appendicitis, cholecystitis, and ulcers of the stomach, are bacterial in origin, and that the attack on the mucous membrane is not on the surface, but through the blood as a destructive infarct, the bacteria being carried by the circulation to the base of the mucous glands—the unprotected rear, so to speak.

DISEASES OF THE EYE.—By George E. de Schweinitz, M. D., LL. D., Professor of Ophthalmology in the University of Pennsylvania. Eighth edition, thoroughly revised and enlarged. Octavo of 754 pages, 386 text illustrations and seven lithographic plates. W. B. Saunders Company, Philadelphia, 1916. Cloth, $6.00 net; half morocco, $7.50 net.

In this new edition Dr. de Schweinitz introduces a new feature of the metric equivalents of the doses of the remedies and strengths of the solutions previously recorded only according to the old system. Reference to the following subjects appears for the first time: Clifford Walker's Method of Testing the Visual Field; Squirrel Plague Conjunvtivitis; Swimming Bath Conjunctivitis; Anaphylactic Keratitis; Family Cerebral Degeneration with Macular Changes; the Ocular Symptoms of Disease of the Pituitary Body; Sclerectomy with a Punch (Holth's Operation); Preliminary Capsulotomy (Homer Smith's Operation); Iridotasis (Borthen's Method); Thread Drainage of the Anterior Chamber (Zorab's Operation); Extraction of Cataract in the Capsule After Subluxation of the Lens with Capsule Forceps (Stanculcanu's Method), (Arnold Knapp's Method); Capsulomuscular Advancement with Partial Resection (Ziegler's Method); Tenotomy of the Inferior Oblique; Window Resection of the Nasal Duct (West's Operation).

DIAGNOSTIC PITFALLS.

"Acute gastritis" is a rare disease in adults. As a rule, appendicitis or gallstones is the correct diagnosis.

"Chronic indigestion" is usually a mistaken diagnosis, the actual condition being peptic ulcer, pulmonary tuberculosis, constipation, or cancer of the colon.

"Bronchitis" usually proves to be phthisis, bronchiectasis or bronch-pneumonia at autopsy or in the outcome.

"Asthma" beginning after middle life is usually a symptom of cardiac or renal disease.

"Rheumatism" has sometimes turned out in my experience to mean: aortic aneurysm, cancer of the pleura, tabes dorsalis, osetomyelitis, spondylitis deformans, bone tuberculosis, syphilitic peristosis, lead poisoning, morphin habit, alcoholic neuritis, trichiniasis and gonorrheal infection. "Rheumatism" is one of the most dangerous of all diagnoses of the conscientious physician.

"Cystitis" is usually a symptom, not a disease. It points to disease below the bladder (stricture, obstructing prostrate, etc.) or above it (renal tuberculosis and other renal infections) as the cause.

"Hemorrhoids" often mask cancer of the rectum.

"Unresolved pneumonia" is frequently a mistaken diagnosis, the real disease being interlobar empyema.

"Malaria" is often given as the diagnosis in cases of phthisis, hepatic syphilis, hepatic abscess and urinary infections.

"Typhoid fever" in a patient's history may mean tuberculosis or latent sepsis (septic endocarditis, suppurative nephritis, etc.)—*Delaware State Medical Journal.*

Under ordinary conditions the contraction of the cutaneous vessels, in a person exposed to cold, prevents the warm blood from approaching the surface in any great quantity and becoming cooled; but this mechanism is temporarily paralyzed by every dose of alcohol, admitting the hot blood to circulate freely over the surface, and to be rapidly cooled down until the patient may be absolutely frozen to death as a result of repeatedly taking "something to keep him warm." This fact is well known to Arctic travelers and to the lumbermen of the Northern forests, who have been taught by bitter experience to let alcohol alone when exposed to severe cold.—S. O. L. Potter.

NARCOTOGRAPHS.

I have been more impressed of late years with the number of men, in commercial life especially, who are inveterate smokers, whose vest pocket bulges with cigars, who sit in an office smoking and being smoked at, forgetful of the successive hours during which they smoke. While there is less drinking of liquor, there is more smoking. The corner saloon is being replaced by the convenient corner cigar store, a welcome social change. The effect in practice is, that we see fewer cases of cirrhosis of the liver and alcoholic gastritis, but more cases of cancer of the mouth.—Robert Abbe, *Medical Record.*

In our experiments, alcohol in large and repeated dosage caused marked morphological changes in the brain-cells which went so far even as the destruction of some of the cells. Ether, on the other hand, even after five hours of administration, produced no observable destructive changes in the brain-cells.—George W. Crile, *Medical Review of Reviews.*

In the United States we are receiving an annual revenue of over one hundred million dollars from the traffic in tobacco. This is no real asset—the real asset is the boy. We cannot afford to repeat the history of past nations. Like them, we may say, "I sit a queen and shall see no sorrow," at the very time when our foundations are crumbling and the handwriting on the walls of our legislative halls, reform schools, penitentiaries and insane asylums unmistakably declare the ruin of the nation.—D. H. Kress, *Interstate Medical Journal.*

According to Pouchet, 40 per cent of all morphinists are physicians, and the wives of physicians also constitute a considerable percentage. Besides physicians, druggists often become morphinists. Morphinism, as a rule, affects those hereditarily tainted, who have less energy successfully to oppose the continued use of the drug. The misuse of morphin is called forth: 1, by continued physical pains; 2, by insomnia; 3, by general ill-feeling, sorrow, care; 4, by bad example, which is especially true of physicians' wives. The pleasurable sensation which the injection produces, the cessation of unrest and anxiety following, urges to the second injection when the effect of the first had worn off, and thus necessitates an increase of the dose.—E. Mendel.

The Secretary of the County Society will please notify The Journal immediately of any error or change in these offices.

DIRECTORY

OF THE

COUNTY SOCIETIES OF THE ARKANSAS MEDICAL SOCIETY

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THE JOURNAL
OF THE
Arkansas Medical Society

Owned and Published Monthly by the Arkansas Medical Society

LUME XIII
No. 6

LITTLE ROCK, NOVEMBER, 1916

Yearly Subscription $1.00
Single Copy 25c

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THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIII. LITTLE ROCK, ARK., NOVEMBER, 1916 No. 6

Original Articles.

EYE-STRAIN—ITS RELATION TO THE GENERAL HEALTH.*

By H. H. Rightor, M. D., Helena.

In considering eye-strain, let us bear in mind the intimate connection between the eyes and the central nervous system. Let us remember that the retina is a part of the brain, that it is actually a protrusion of the cerebrum. What acts on the retina in physical truth, acts on the brain. Unfortunately, owing to our artificial manner of living, to our highly complex civilization, to the constant use to which our eyes and those of our ancestors for many generations have been put, an enormous number of us have eyes that are not optically perfect. These imperfections may be due to congenital variations of the refractive media, the cornea, crystaline lens, or the vitreous, to variations in the length or shape of the globe, or to lack of balance of the external eye-muscles.

The attainment of the vision that is necessary for the individual, in spite of these obstacles, may or may not cause eye-strain. I would define eye-strain as the attainment of vision at a price to some part of the economy. Vision should be free. The cost of eye-strain is charged first against the eyes themselves. Uncorrected astigmatism is the starting point of myopia which in turn is the cause of changes in the retina, choroid, and vitreous. This damage, when done, is irremediable. The result of eye-strain most frequently is manifested in the appendages of the eye, the lids, conjunctiva or lachrymal apparatus. Redness and injection of the conjunctive eczema of margins of the lids, falling of lashes, styes, chalazia, lachrymation, and conjunctivitis are all caused by eye-strain. Of course, they are not always caused by eye-strain.

Another very frequent result of refractive errors is the tendency of the eyes to deviate. This may be only a slight esophoria or exophoria or maybe actual squint. Thirdly, and it is to this that I wish to call your attention in particular, the cost of eye-strain is borne by remote organs. These reflex eye symptoms, as they are called, may be manifest in any or all parts of the body and run the whole gamut of functional nervous and psychic diseases from simple headache to profound phychoses. My purpose in speaking of this was to emphasize the fact that there is no particular symptom or group of symptoms by which eye-strain can be diagnosed; but that it requires the combination of a careful clinical observer with a trained and skilled ophthalmologist to correlate the symptoms and decide just what the etiology of the clinical symptoms is. It is as great an error to neglect examining the eyes of patients who suffer from obscure pains in the head and body, from nervous indigestion, dizziness, vertigo, or insomnia, in fact of all sufferers from all sorts of nervous and psychic conditions for which other adequate cause cannot be determined, as it is to neglect the examination of the urine or blood. In making this examination the patient must be considered from every point of view.

Nothing could be farther from the truth than to think that the fitting of glasses is a simple matter; that it is only a question of putting lenses before the eyes and finding out through which one the patient can see the best. The proper fitting of glasses, requires the highest degree of the ophthalmologist's skill. A large number of patients come to the oculist's office for failing vision, or the inability to focus properly, who are suffering from disease in the fundus caused by lesions of heart, kidneys, brain or arteries. An enormous percentage of chronic headaches do come from eye-strain; but many are caused by disease of the nose or its accessory sinuses —from febrile or intereranial diseases. Girls

*Read before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2, 3 and 4, 1916.

at the time of puberty and women during their menstrual period are quite subject to head pains; absorption of toxins from digestive disturbances or faulty elimination is a prolific source of indefinite pains. The same may be said of abuse of the eyes by using them under improper lighting conditions. Now, all of these patients may have hyperopia or astigmatism; but when we think how many countless thousands of people go through life busy and happy in perfect health, in spite of ametrophia, and only come to the oculist at forty-five, on account of the recession of their near point or inability to read well by a poor light, we will realize that some one much more competent than an "eye-sight specialist," should be consulted to determine whether these patients need glasses or not. No grosser error could be made than to put glasses on the convalescent from some debilitating disease, or after a surgical operation, or on women after their confinement, just because their eyes tire easily. The eye muscles simply need rest, and should have the same right to recover their health and strength that the leg or back muscles do; yet all of *these*, and *all others*, who consult the self-styled optometrists will get glasses. The relation between the general health and the eyes, therefore, is most complex. It is just as important to know what eye-strain *is not* as it is to know what eye-strain *is*. The mere existence of refractive error surely does not mean eye-strain in every instance; and yet, an inestimable number of lives have been changed from semi-invalidism to robust health by the prescription for a very weak lens. In this connection, I want to emphasize the fact that you cannot conclude, because a patient is wearing glasses that his eye-strain is relieved. First, because the practice of trusting this most delicate organ to the host of incompetent mechanics is all too common. Second, the refraction often undergoes a change in a comparatively short time, and lastly, because a glass that is *nearly* right very often fails to relieve. I ask your pardon for taking up your time with these very elimentary and obvious facts, but a few days' visit to the office of any busy oculist will convince you that there is a crying need for more enlightenment somewhere, on this subject.

In concluding, I take the liberty of quoting a summing up on this question, which appeared in the March issue of Archives of Ophthalmology, by Dr. Linn Emerson, of New York, which seems to me to cover the ground better than anything I have seen for a long time.

Dr. Emerson in concluding said:

"1st. While formerly the fitting of glasses was relegated to the maker of spectacles as beneath the dignity of the ophthalmologist, at present it constitutes the larger part of ophthalmic practice.

"2d. While formerly it was thought unnecessary or even undesirable to use a cycloplegic, it is now conceded by most ophthalmologists that in patients under thirty-five years of age the use of a cycloplegic is a necessity to accurate fitting.

"3d. The ophthalmologist who persists in doing refraction without a cycloplegic is, in the eyes of the patient, and often justly so, no better than the optician.

"4th. The day of the superficial, careless, hurried, slip-shod fitting is past, and to be successful and relieve the patient careful and accurate refraction is necessary.

"5th. The oculist who tells a patient he has not astigmatism enough to justify its correction is behind the times, and should follow Elbert Hubbard's advice to "get in line."

"6th. At least 50 per cent of headaches of civilized humanity are due to eye-strain, and the general practitioner who treats a case of recurrent headache without having the patient's refractive condition investigated, is as remiss as though he neglected blood pressure or urinalysis.

"7th. As oculists we should avail ourselves of every opportunity to impress on the general practitioner and the public the fact that eyestrain is a frequent cause of headache, insomnia, vertigo, nausea, failure of general health, and various nervous and psychic ailments.

"8th. The unskillful and careless fitting by oculists in the past is in a large measure responsible for the presence among us of eye-sight specialist or optometrist; and in many instances his fitting is but little worse than the oculist who does not find it necessary to employ a cycloplegic.

"9th. Badly adjusted glasses are as often a cause of failure to relieve as improper fitting. Of the glasses worn today, less than

25 per cent are accurately fitted and properly adjusted.

"10th. The accurate fitting of glasses to the young will reduce the ophthalmic surgery necessary in the later decades of life by at least 10 per cent."

DISCUSSION.

Dr. F. Vinsonhaler (Little Rock): This paper, I think, is one that ought to be discussed by the general practitioner, while the oculists sit by and have the advantage of the discussion. There is no subject that should interest the general practitioner more than the one that has just been described by the doctor.

In Florence there is a tomb that has been in existence since the Middle Ages, and the inscription upon that tomb is:

"Here lies the inventor of spectacles, and may the Lord have mercy upon his sins."

Whether there was anything prophetic in that inscription or not, it is not for me to say. But, those of you who are familiar with the fitting of glasses as is now carried on will realize that undoubtedly the one who wrote that inscription was indeed a prophet.

It is not uncommon for us to examine or reexamine eyes and to find them wearing glasses utterly different from what a scientfic examination would call for.

The doctor referred to the fact that a majority of that work, or at least a great deal of the work, is carried on by the optometrist. We find them constantly encroaching upon this domain. Now, whether they have any right to be there, whether they are really serving the public by being there, is a question which the public, of course, will have to decide for themselves. We don't think so, and we think the results of examination made by us of the work that they do justify us in coming to that conclusion. We find this to be a fact, that the profession, I regret to say, and I am mortified to say, are being influenced by these very individuals themselves. It is not an uncommon thing for a mother to bring a child into the office for refraction, perhaps referred by a general practitioner, or to come herself, and say, "Doctor, I want this child examined for glasses, but I don't want any drops used in the eyes." We find this impression created by these very men; they are not allowed by law to use medicine themselves in this way, and very frequently they make it appear to the patients that such methods of examination are absolutely dangerous.

I saw in an optometrical journal the other day, which was sent to me by mistake, a copy of a sign which was printed for the purpose of being used by optometrists, and the sign was, "No poisonous drugs put in the eyes." Now, it is nothing but human nature to be influenced by that sort of thing to a certain extent, and I think the profession ought to stand squarely and strongly upon that question. I don't think they ought to be influenced to do slipshod work or to slur over cases. I think we ought to take a square stand that it is necessary in a majority of these cases to be more accurate, more thorough, and to use more care in the examination, especially to use atropine where it is absolutely indicated, for it is only in this way, especially in children, that accurate results can be obtained.

Now, he spoke of another thing—the turning in of the muscles, strabismus or squinting, especially as it occurs in children. That is a condition with which the general practitioner ought to be familiar. The fusion center in the brain is developed very early in children; what we mean by that is the ability of the two eyes to project upon an object at one time, so that the image will fall upon a corresponding position in each retina. That fusion center develops before the sixth year of life. Where it is not developed by reason of the fact that glasses are not adjusted or there is some error in refraction, the eye in which there is that error becomes blind. It becomes blind from disuse. Children grow up blind in one eye owing to the fact that the parents or those interested in the child, or the family physician himself, is not familiar with this fact. It is the custom for the doctor to say, "That's a subject I am not familiar with. Let the child alone; or when it gets a little older take it to an oculist." The beginning of the fusion center takes place when the child is about six weeks old, from two to six weeks of age, and from that time on it begins to develop and, after a few years of allowing the eye to wander about at will, without this development of the fusion center, the eye becomes permanently and hopelessly blind. So, that the individual grows up with a blind eye, for which, I regret to say, its parents, sometimes the family physician, is responsible.

Now, this is a condition that the practitioner ought to be familiar with, because it is to him that the question is most invariably referred for the first time. And, if he does not see the gravity of the situation, as I say, the child grows up blind in one eye, when with a little care and attention ocular fusion could be developed and a good eye secured for the child.

I shall not go into details of the subject, but simply mention that, as the doctor has referred to it, and emphasize the importance of the general practitioner being familiar with the fact that the child should be refracted early, that they should be carefully examined, and in that way, and in that way only, can vision be conserved.

Dr. L. P. Gibson (Little Rock): Many, many years ago they had in Little Rock, Ark., a temperance society that used to meet regularly at the First Presbyterian Church. They met every two weeks, I believe, or once a month, and they went through the most argumentive ceremony to keep each other from drinking. I don't think that in that temperance society there was one of them who could take a drink. There were some that had never taken a drink; and if they had taken a drink, I don't think they would have taken a second one. Yet, they met regularly and kept up that organization for years. It was composed of good, old-school Presbyterians. Strange to say, it never spread beyond those old people that could not take a drink, never had taken a drink and would not take a drink. I am reminded of that by this discussion of the specialists, the ophthalmologists and the oculists.

Now, I take part in this discussion; but I want you to understand that I do not do it as a general practitioner. I am not a general practitioner, if there is such an animal. I don't know what I am. Sometimes I think I am an internalist, and then I have a case of externalist. When I get one of these cases of eye-strain, I think I am an eternalist.

But, seriously speaking, there is nothing in the whole domain of general practice that is more neglected by the general practitioner than the treatment of headaches by dopes, aspirin and the coal tar derivatives. Headache is not a disease any more than a cough or a sneeze is constipation. It is the name of a symptom; and the practitioner is prone to treat that symptom to relieve the present condition and not remove the cause.

The first thing is to eliminate the eyes, if it is headache. Then, if I find a man who knows enough

about the nose, I eliminate the nose. Then, the maxillary and other sinuses, and then the tonsils and the uvula, and go on down that way until finally, when I have eliminated all other causes, of course the patient is well, and there is nothing for me to do.

But, seriously, I want to impress on my brother practitioner the importance of eliminating the eye-symptom as the cause of headache. A great many have nervous symptoms for which Beatty's operation ("normal ovariatomy") used to be performed, for instance. There is nothing in my experience more satisfactory than to send a patient of this kind to an oculist and have the symptoms relieved. When I say "oculist," I mean a man who is learned in that branch. I'd just as soon treat them myself as to send them to a good many that pretend to be, but are not thorough.

I speak more feelingly because, for forty some odd years, I have been a victim of astigmatism myself, and have been misunderstood and misrepresented for these forty years because, on account of some defect in my vision, I had that stern look—knit frown on my face— and I consulted some of the best eye doctors in our town, and even now I have to go around with one eye on it, at a time when things are more interesting to us than ever before in Little Rock, owing to the modern styles nowadays, when there is so much to see!

Dr. J. W. Scales (Pine Bluff): I do not want this subject to go by without some specialist talking besides Dr. Vinsonhaler. I want to say for the benefit of Dr. Gibson that there are two kinds of eye-strain. It is like the boy's composition on corn. When he says "corn is of two kinds;" one grows on the toe and the other on the ear. When we want to operate on the corn on the ear, it is best to gnaw it off; when we want to operate on the toe corn the best way is to cut it off. So it is with eye-strain; one will be relieved by glasses and the other will not. And in that other classification are those who go to the oculist to have their headache relieved and then return to the family physician, who referred them to the oculist, saying "that instead of the glasses making him see better, it makes him see worse, and that the oculist has evidently made a mistake." He is then referred to some optician, who, of course, weakens the glasses, and, of course, fails to relieve the eye-strain. The deplorable fact is that the physician does not grasp the idea that in some cases it is necessary for the patient's vision to be fogged to some extent, rather than to be improved. They do not seem to realize that the fitting of glasses requires more skill than is possible for an optician to acquire. It is the most tedious work, the most care-taking ordeal, that the oculist has to deal with; and even, it is often necessary for the second visit before certain facts can be ascertained. The point upon which I wish to put special stress is the necessity of the general practitioner realizing more fully the difficulties which often enter into cases of refraction. I have often told physicians that the work of fitting glasses by an optician compared to an oculist is like a druggist prescribing for a case of typhoid fever, and a physician prescribing for the same.

Dr. L. H. Lanier (Texarkana): When organized medicine has accomplished its greatest aim, it will be when physicians are so united that they will stand squarely behind each other in endeavoring to conserve the public health, and that is not unfortunately the condition of affairs today. There are physicians —good physicians—that inadvertently, without much thought, refer patients to opticians; when, if they would give it the least bit of thought, they would understand that these men are not trained in anatomy, in pathology, in bacteriology, in all the branches of medicine that are essential to make up a good doctor and a good oculist; that they are utterly deficient in knowledge respecting these branches, and that they are not fitted to adjust glasses to any eye, diseased or otherwise, from a scientific standpoint. Yet, this thing does occur. It occurs here in this city, it occurs in your city, it occurs everywhere, but it should not be done. There ought to be some understanding among them about it, and it is no more right for a physician to refer patients to opticians for glasses than it would be for the oculist to refer his patients, that needed treatment in a general way, to an advertising doctor, some itinerant doctor that came through town treating general cases. I think there is a marked analogy between those illustrations. I do believe that we ought to have some understanding in this thing, and while unfortunately our efforts to get the proper laws in the last General Assembly were frustrated, I do believe that there is yet some chance to get the proper service to the people, and that is what we are here for. I am very glad, indeed, that this subject has been discussed. I thank the doctor for his paper.

Dr. T. M. Fly (Little Rock): I want to tell you what the average spectacle vendor knows of this kind of work. I was sitting up all night with a patient in the country, and among other visitors was a spectacle vendor. We were sitting in front of an old-fashioned fire-place, and this visitor said, "Doctor, I would like to ask you a question." I said, "All right." He said, "I want you to tell me what astigmatism is." I told him what it was, or what Dr. Vinsonhaler said it was. He said, "Is that so? Well, do you know, I thought it was something like hypnotism."

THE RELATION OF EDUCATION IN SEXUAL UNION TO EUGENICS AND CONJUGAL HAPPINESS.*

By Cowley S. Pettus, M. D., Little Rock.

Woman plays the prelude to every man's life. It is either a melodious song, or variations on an instrument out of tune which fails to harmonize with the soul and is unpleasant to the ear. I have never found a more impressive statement of the part woman plays in the life of man and man's natural and normal conception of woman than in the words of Longfellow, in his "Spanish Student." Victoria, the Spanish student, after expressing himself most learnedly and beautifully, brings forth from Preciosa, a Gypsy girl, his lady love, these words of despair:

"I cannot reason; I can only feel! but thou hast language for all thought and feeling. Thou art a scholar; and sometimes I think we cannot walk together in this world! The distance that divides us is too great! Henceforth thy pathway lies among the stars; I must not hold thee back."

Victoria, with that feeling of a natural man, answered her:

"Thou little skeptic! dost thou still doubt? What I most prize in woman is her affections—not her intellect! The intellect is finite; but the affections

*Read before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2, 3 and 4, 1916.

are infinite, and cannot be exhausted. Compare me with the great men of the earth! What am I? Why, a pigmy among giants! But if thou lovest,—mark me! I say lovest,—the greatest of thy sex excel thee not!''

Is there a real man who thinks differently from the Spanish student? Such an ideal of woman with man is as natural as it is for fish to swim.

When God created man it was not His intention for marriage to be prearranged by relatives or friends as a matter of selfish interest. Marriages for convenience, for influence, for money or station, are in a sense as hideous as the selling of their bodies among prostitutes. This practice, like all wickedness, has crept into the world, destroying many who respond to its beckoning hand and still remain among the unfortunate forces that interfere with a phase of married life giving much of happiness to man and wife—copulation.

While the courtship between the Spanish student and the Gypsy girl is indeed beautiful, it would be horribly sad that, after marriage, they should not know how to copulate properly, whereby that natural passion of love, stimulated by the soul, would be allowed in ignorance to wither and die; transforming two such delightful lovers into dissatisfied individuals. During the twilight moments of the evening, when love's sweet song is the most dulcit, and all woman's thoughts surcharged by the sentimental current originating in the soul, her entire being, at this romantic time of twilight, thus stimulated, reverts to her courtship days, and from the memories of the deep feeling experienced during these delightful moments, governed by hidden passion, she cries out in ecstacy, as she awakes from her electric, mesmeric dream, and wonders what it means.

It is sad for a courtship so sweet and sacred to come to a sudden interruption by such a marriage that is unable to make it stronger and more attractive, all of which could have been remedied by correct advice from a thoughtful doctor as to how sexual union should be performed.

It has been contended that copulation was a matter of nature, and that it was intended man should, through intuition, know how to copulate. It seems there are some who thus have this knowledge, but this is rather an exception. As a whole, this view is fallacious, and its damaging effects are readily appreciated by scientific doctors.

Happiness, progression and reform depend largely upon correct instructions at this point. Eugenics, of which today so much is said, cannot reach its zenith nor play the part it should in developing our race to the perfection it wishes, with the present ignorance of copulation. To attempt it is like a child trying to run before it has learned to walk. It can be said with authority, that eugenics will never perform its greatest and highest service until the public is better educated on this kindred subject. In teaching the public the proper copulation like teaching other important matters, we find each is a case to itself. It is necessary to advise husbands differently. To illustrate, I shall review a case coming under my observation.

My warm personal friend was married. Until two years after his marriage I did not see him again. He related to me his disappointment in married life. He was sorely dissatisfied on the sexual side. Despite the fact that he had been married two years, he had never enjoyed a sexual intercourse with his wife. He decided there was some deformity, because he was unable to enter her. His desperation was pitiable. He was anxious that I examine her; which I did. She was positively normal, and there was no physical reasons for such an unfortunate interference of perfect copulation. On further investigation of the case I discovered that he was entirely ignorant of his duties necessary to make a success of the act. I instructed him, among other things, that he must arouse her passion by caressing her, fondling her and treating her tenderly and kindly, and explained to him that her extreme asthetic nature rebelled because it could not adjust itself to an act which she considered so horrible. She thus felt about the sexual act, because he had never aroused her to desire it. With such a feeling when he attempted to enter her, there was a spasm of the vaginal spincter, which caused a pain and was responsible for his failure to enter her.

You could not imagine a more distressing situation. Both of them great and noble; perfect and normal physically; highly educated; well versed on eugenics, and would have been readily given the seal of approval by those espousing the cause of eugenics; yet both miserable, disappointed, disgusted, and rapidly approaching the point of desperation. It took me fully two months to regulate affairs with them. Finally, one morning, with

a beaming smile, my friend came to my office to apprise me of the fact that he had entered his wife, and that she showed signs of pleasure. She later became pregnant and gave birth to a perfect child, which, from its birth, has been the embodiment of health. Today they are both happy and satisfied with life, loving each other and finding much in life to live for. Life for them has changed from a dark and dismal existence to one of sunshine, love and happiness.

This is one illustration of what we can do along the line of teaching the layman copulation.

Again, there is an impression among some women that man's ideal woman is one without passion. This false impression has a tendency to influence women to misrepresent their sexual feelings to their husbands, and leads them to suppress their natural desire. There are noble women with strong sexual passion who suffer greatly by reason of this suppression, though it is somewhat in accordance with their esthetic feelings; however, when in these cases passion is correctly aroused suppression disappears, and suffering gives way to joy and happiness.

There are women married to men whom they do not love, and whose husbands may be well informed along the line of sexual intercourse, but their grand womanly pride, in which the finer sensibilities are aroused, repel his advances, thereby rendering him absolutely unable to create the least desire on her part. Cases of this class merely demonstrate that wonderful refinement of real woman. It is an exception and practically nothing can be done to bring relief for them. A strong characteristic of woman is to desire a certain amount of rule and subjection by man. This may become necessary for him to gain the complete respect and confidence of woman; but with it, brutality must not assert itself, or else disgust and contempt displaces respect and admiration.

To give to woman the satisfaction desired in intercourse, man must be considerate of her in every respect. He must be tender with her, yet gently firm. Woman's part to play in the act is modesty. Man must be the aggressor; woman the responsory. It necessitates artfulness to some degree on the part of both. The failure of man to arouse woman successfully for this enjoyment is due to his misunderstanding her. A real modest woman rarely allows herself to think of an intercourse until something is said or done to remind her of it. The reason the prostitute is more pleasing to the brutality of man is because she retired with him for the specific purpose of having an intercourse; they are both thus in readiness and she has no such barriers as modesty and refinement which man must break down to approach the stage of readiness.

How should we give the layman this instruction? Unfortunately, for the welfare of humanity, there are doctors as ignorant at this point as are the layman. The many ridiculous ideas of doctors on copulation and their ideas of the reason for the lack of its enjoyment by wives of men who come for advice, is astonishing, amusing, pathetic and disgusting. Until the medical colleges of America give scientific and practical information to their students on this subject, they are omitting from their curriculum a teaching which is as important as any other subject taught.

There are those in our profession who are failing to give this assistance to their fellow man because of their ignorance on this important subject. Others do harm in attempting to advise because they are not acquainted with the scientific side of the subject. As a rule, one lecture on copulation gives ideas of sufficient value to the student to enable him in his practice to help the poor unfortunate individual seeking his advice, by giving information desired and needed.

Instructions how properly to copulate, after given, are so simple, that we wonder at their importance.

We should instruct a man coming to us for advice, complaining of the lack of passion on the part of his wife, by telling him that his failure to please his wife when having intercourse with her is due to his not giving her the consideration demanded to make this family duty and high privilege pleasing to her; that he should not attempt an intercourse with her without first arousing her desire for it; by giving him all details, etc., that he may know his failure was due first to his lack of artfulness in creating a desire in her, and second, in his failure, after he has slightly aroused her, to show her the consideration of a little time for her to complete the act, by withholding his ejaculation, by slowly and gently performing the act, stopping friction when he begins to realize that he would likely finish too quickly for his wife's pleasure, then by lying still for a few moments and getting control of the nervous mechanism in-

volved in the act. In short, throughout all the intercourse to eliminate brutality, and have but one thought of her pleasure, playing along with her until she reaches the point where she may have the same delightful pleasure he is enjoying.

After we have gone into and explained all these points with our patient, if he has never enjoyed married life as he should have, he should then begin to live satisfactorily, and will thereafter forever bless the day when this important consultation was had; and we shall be pleased to see the satisfaction and grief disappear through our advice. Thus results happiness and good will to all.

There is not a command in the Bible bearing more upon the morality of a nation than "*Thou shalt not commit adultery.*" Yet, I cannot but wonder if the obedience of it at the expense of the nervous system, thus giving further encouragement to Christian Science and helping to fill the insane asylums or to create unhappy homes, is better than the satisfaction of this desire of nature, which satisfaction eradicates to a considerable extent the foregoing ills.

I cannot reconcile doctors being truly scientific, and a disbeliever in God and the teachings of the Bible or that he does not attempt to encourage the public in obeying His Commandments. Then, how can we fail to see what an assistance we can offer in this respect by applying our religion in our work, in giving more time to the education of the innocent and ignorant layman as to the facts concerning legitimate, satisfactory copulation? His advice might assist greatly in saving thousands from breaking the seventh Commandment, and thereby give them greater strength to keep other Commandments.

DISCUSSION.

Dr. C. H. Cargile (Bentonville): I cannot in the very short time allotted discuss this paper as I had intended.

I would appeal to those who think there is nothing in this subject, as well to those who regard discussions of it as obscene, to investigate for themselves and be convinced. Of course, some will not confess. I first became impressed with the importance of it through the following interesting case:

I was consulted by a lady who I had known before marriage as very jolly and vivacious, entering into all of the social and civic matters with more than ordinary zest. Not long after marriage she underwent very great changes. She seemed to lose interest in everything. No more was she seen at church, on the streets, in company or elsewhere except at home. She had become a recluse. She was dispirited. Under these conditions she consulted me. Failing to find causes of her depreciated health, I commented on her seclusive life and advised her to go out more, and to again engage in the affairs of the town as of old. She said there was too much to overcome. I perceived that she was struggling against embarrassment in her effort to tell me something of the trouble from which she was seeking relief. A little diplomatic assistance enabled her to relate the following sad experience.

She said that before marriage, especially after having become engaged, she experienced what she supposed was a very strong sexual sense. How sad her disappointment. Of how with each intercourse she was more and more disappointed, because each time her passion became more and more obtunded, and finally obliterated, and even worse, until the very suggestion of the act became offensive and disgusting. All as she said because her husband finished just as she was about to experience. It is interesting to note that this same husband not long after marriage had applied to me for treatment for premature ejaculation, which he said had followed sexual debauches and gonorrhea before marriage. Thus, we see, as is too often the case, this good wife had to pay the penalty for his misdeeds.

This experience so impressed me that since then I have several times investigated others along this line and not always without confirmation.

CAESAREAN SECTION PROCEDURE OF ELECTION—LESS DANGER TO MOTHER AND CHILD WHEN INTERFERENCE IS REQUIRED TO EFFECT DELIVERY — REPORTING THREE ELECTIVE CASES IN TWELVE MONTHS.*

By Will Cantrell, M. D.,
Greenville, Texas.

Abdominal delivery has been practiced in some countries since the recording of medical history. Known to the Israelites and performed by the Egyptians and Indians under religious rite, it has also been successfully practiced by the Negroes of Africa. In its first application, the removal of a dead mother's living child, it was legalized by the Romans. For a great many years the performance was made by barbers and priests, a Spanish priest having done Caesarean Section, on a living woman, about the middle of the Thirteenth Century. Italy records a similar case in the year 1540. The first independent treatise on the subject was published in France in 1581. Legendary claims are at such variance with recorded historical narrations that we are quite unable to understand whether the manner of Caesar's birth gave name to the procedure, or if, indeed, it depends on the Roman Law which required "Lex Caesara," the delivery of a child after the mother had died or was moribund. The extensive and useful application of Caesarean

*Presented to the North Texas Medical Association, Greenville Meeting, June 27 and 28, 1916.

Section might well name it for that great Roman soldier, and now in the third development or period of its application we do well to emulate his example as he came down from the mountains of Cisalpine Gaul and crossed the Rubicon. He did not halt and tremble on the bank or cry for a bridge, but plunged straightway into the turbulent stream and made a home-run to the other shore.

We may divide the application of abdominal delivery into three periods; the first, from the beginning of medical history until the beginning of the Seventeenth Century, its application almost wholly directed to the delivery of the child from a mother that was lost. The second period, embracing the Seventeenth Century and continuing until about the last 80's, the operation resorted to for the purpose of making a complete delivery, otherwise impossible, with the hope of saving the mother, and if possible the child. The third period we are just now entering into with a proper understanding of the procedure and its true and full application.

The field for this operation embraces contracted and deformed pelvis cases, those having tumor that obstructs the pelvis, placenta previa, eclampsia and prolapse of the cord, with quite a few other conditions that I might mention.

I will not enumerate in futher detail the general requirements for abdominal delivery or the technique, but will confine my remarks to *Relative Disproportion Between the Child and the Mother's Pelvic Canal.* It is in this condition that we find our greatest practical requirement for Caesarean Section, a mother presenting a moderately contracted pelvis with a normal child, or a normal pelvis with a large child, or a small mother whose child is out of proportion by inheritance larger than herself, bring to us most of the distress we see in confinement cases.

Such cases do not progress properly; in fact, most of them are unable to accomplish engagement, and after labor has continued for quite a long time a high forceps is suggested and in most cases undertaken, and quite generally by this means the delivery is accomplished. I believe this procedure to be absolutely wrong because it is dangerous to both mother and child. However well versed we may regard ourselves in the use of forceps, it is certainly a hazardous task to place them above the brim of the pelvis, and in so doing we are simply trusting to luck and to the Lord to take care of us, because we do not, and can not, be quite certain of the application, and because of the further fact that we will likely do great damage to the child by forcing an unnatural engagement and the completion of forced delivery which disregards the normal straits and turns in the pelvis. It is quite probable that the future will determine that the so-called idiopathic epilepsies are really traumatic in nature, dating to the birth of the subject, and due to the manner of effecting delivery.

For many years embryotomy, with its ghastly infant mortality of one hundred per cent, was the competitor of Caesarean Section. This was due to the fact that surgical technique in abdominal surgery had not been brought to a practical basis. The total infant loss makes embryotomy an incomparably poor and unworthy competitor. However, this fact may be forgotten and still make the claim in favor of Caesarean Section because it offers less danger to the mother. I mean to say that a properly executed abdominal delivery affords greater chances of recovery than does the proceedure of embryotomy. In the process of abdominal section you have command of the field and can handle the trauma feature to the best advantage, thereby leaving less liability of infection. When embryotomy is made, there is, of necessity, great danger of injury, trauma, lacerations, jabs and abrasions, which invite infection and cannot be properly dealt with and repaired.

The following may not apply to you, but it is nevertheless true, and I must admit that I can recall it on more occasions than is pleasant to remember.

Calling someone to assist you, or having been called to assist in the delivery of a case which had been in labor all day and all night, an examination verifies the fact that the head is not yet engaged, although the patient is exhausted by the outlay of all the normal power she had possessed in an effort to deliver herself. These cases are usually primaperas, passed the sunny side of the twenties, yet it is not uncommon to find a multipera with sufficient disproportion to require interference to effect her delivery. A high forceps proceedure or podalic version is agreed upon and delivery effected of a perfectly normal and apparently healthy child, alright in every way, except he is dead. In the past we have not been quite certain whether or not we should charge ourselves with this loss, but the future will charge such to us. In these cases we also inflict more or less injury to

the mother; if we use forceps, we are most certain to lacerate the cervix and very liable to make injury to the floor of the pelvis, the perineum and the roof of the vagina. On the other hand, if we introduce our hand and arm and make version, we will injure the mother, but to a less extent than by the use of forceps, and we take great risk for the life of the child by pressure on the cord while the head is being brought through the pelvis. It is in these cases that we should advocate and execute Caesarean Section. If we do them timely and well, there will be a very small mortality rate to mother or child. It seems to me that a median line abdominal scar may well be shown an asset as against the liability group, cystocele, rectocele, cervical and perineal lacerations. Indeed, there is so much that might be said of pelvic injuries with their hazardous symptoms, real, reflex and psychial, that I prefer to allow the discussion to develop their true meaning.

I have endeavored to say that in all cases of delayed labor with non-engagement due to disproportion, that I regard Caesarean Section as the procedure of election, relegating high forceps, with embryotomy, to a well earned page in ancient history.

My report is not consecutive, but is of three elective cases. Designating No. 1, I make report of multipera, who had been delivered twice in the past few years, both breech presentations, and both labors greatly contested, requiring the services of three or more doctors on each occasion, with two well developed dead babies. We had consultation about midterm, and agreed that if her labor presented a breech, or if she had undue trouble in engaging her child, we would do Caesarean Section. She came to the hospital for the delivery, and one morning in December, 1914, she had the first manifestation of labor. A breech presentation was clearly manifest, and two other doctors were called to verify the position, while I made ready to deliver her through the abdomen. Caesarean porro was completed within two hours after her first symptom of labor. It was necessary to make this modified porro on account of the existence of fibroid tumors, which had been correctly diagnosed before she came to me. I say "modified porro" simply because the stump was treated intraperitoneally. The child was an over sized, well developed boy, and at once declared for preparedness, and seems at this time quite able to bear that banner to a safe winning. The mother returned to excellent health.

Case No. 2 was encountered in mid-summer, 1915. Her physician telephoned me early in the afternoon that she had eclamptic seizure in the forenoon and had not regained consciousness. He asked me to come and make the delivery. On reaching her home, I found the patient yet unconscious, with an elongated and undilated cervix. She purported to be between six and seven months. Caesarean Section was agreed upon and readily performed. The little child died within a few hours from lack of development. The mother made a good recovery. A few weeks later, when I again happened to be in the neighborhood of her home, I was formally introduced to the mother, and believe that she was in better condition than she would have been had we forced the delivery through her pelvis.

No. 3 is a multipera, whom I had delivered five years before, a healthy girl baby, and with no more serious incident than a lacerated cervix, which I repaired at a later date. She was due to be again delivered in December, 1915. About the middle of her term she developed a peri-rectal abscess, which I opened under local anaesthesia while it was yet a blind pouch. This abscess refilled and was reopened five times in all before the near approach of her labor and was evidently refilling at the time her count was up. A few days before her expected confinement, I advised Caesarean Section as safer procedure than a normal delivery on account of the presence of this infection and its certain rupture and dissemination at the time of her delivery. After deliberation and various means and methods in consultation, the family and myself agreed on Caesarean Section as a full partnership, fifty-fifty game, believing it best for her to transfer her trauma to a safe distance from this abscess. She came to the hospital two days before confinement, and when labor appeared we did Caesarean Section without making an examination of her vagina and delivered another healthy girl baby much larger than the preceding child. Mother and child both made good recovery and in that they also favor "preparedness," they are both happy and well. The abscess was certainly re-filling at the time she was delivered, but was left entirely alone; no sort of douches or applications were made in the vagina; spontaneous rupture eight days after the operation drained and relieved for the sixth time this abscess pouch, and there was not apparent a single symptom of abdominal, pelvic or vaginal infection.

THE JOURNAL
OF THE
Arkansas Medical Society

Owned and controlled by the Arkansas Medical Society and published under the direction of the Council.

DR. WILLIAM R. BATHURST, EDITOR

PUBLISHED MONTHLY. Price, $1.00 a Year in Advance. Single Copies, 25 Cents.

Entered as second-class matter, June 21, 1906, at the post-office at Little Rock, Arkansas, under Act of Congress of March 3, 1879.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Address:
The Journal of the Arkansas Medical Society,
810 State Bank Building,
Little Rock, Ark.

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Anonymous communications will not appear in the columns of this Journal, no matter how meritorious they may be.

Editorials.

THINGS ARKANSAS NEEDS.

We are glad to note that the ladies of the various clubs and citizens generally are bestirring themselves to secure the proposed new State General Hospital. Arkansas has been behind many other states in this respect. There is provision for the deaf, the blind and the insane; but none whatever for the sick, save the meager provisions made in the separate counties.

Besides the new State Hospital we need an adequate appropriation for the State Board of Health and for the pay of inspectors, without which the present laws are difficult of enforcement.

It is up to the medical men of the state, whether affiliated or not with the Arkansas Medical Society, to get busy now and lay these matters before their representatives and senators elect and get their pledges to vote for health measures. Don't wait for opportunities—make opportunities.

THE LATEST MARTYR.

The noble profession of medicine has a long list of martyrs, men who, knowing the risks, have laid down their lives in epidemics trying to save others or in experiments for the benefit of the race as in the fatal tests of the propagation of yellow fever by the mosquito for example. On Sunday, October 8, there died Arthur L. Hunt, in Wasington, D. C., the latest martyr to the perils of his profession. Attached to the Health Department, he attended the cases of infantile paralysis and himself fell victim to it, his being one of the occassional cases wherein the disease attacks the adult. The hero in battle is stirred by the martial spirit, he is accompanied by his fellows in the mad charge and is borne along almost without consciousness of his surroundings, the martyr who is burned at the stake has the enthusiasm of religion to sustain him; but the physician who deliberately goes into peril has none of these stimuli. It requires more real courage to face his kind of danger than to lead a forlorn hope. Yet he does his duty and if he dies his name is forgotten, while the name of the killer of his species, the heroes of war from Alexander to Kitchener, is enshrined in the hearts of his countrymen and in the histories of the world. But to the heroes of the medical world, the unsung, unhonored, unknown heroes, we can merely say: "Greater love hath no man than this that a man lay down his life for his friends."

WORK AND PLAY.

The papers record the death at Chicago of John Agnew, aged 84 years, and a pitiful story is related of how the old man died of a broken heart because he had been retired as a pensioner and could no longer work for the city, after a service of 64 years. And later came the editorials and sermons on the blessings of work and how an active mind deprived of something to do must needs become atrophied—and more mush of the same kind. But these doubtless well-meaning moralists really miss the real point. The trouble with the old pensioner was that he allowed work to engross him. Work with him, and thousands like him, was an obsession. No work, no aim in life, is their creed. Yet may we ask, must a man necessarily work day by day all his life, till overtaken by age and the machine no longer fit for the task imposed upon it—or else die of ennui? One reason for the increased ratio of deaths among men after middle age is that they work too much and too hard. The men who can play as well as work are, generally speaking, the men who best stand the strain. Children play, why not old men when they have done their share of life's work? Play is far more a necessity for grown men than perhaps is generally sup-

posed. It is not work that kills nor play that kills; but "care killed a cat." Men can stand business worries if they learn how to play. When a man is eighty-four years old he has earned a rest. If rest palls on him it is because he has not learned how to play. There is travel, fishing, reading, golf, billiards, even cards and the theater, and a score of other forms of recreation which can keep him engaged and satisfied with life and which will prolong life. John D. Rockefeller is an example. He is well over eighty years and he is at golf and other forms of recreation daily. We read of Carnegie and Thomas A. Edison on fishing and camping trips, and they are hale and hearty men who have learned to play as well as work.

Work is essential in due season. But work out of season is as much out of place as play out of season. To work just for the sake of work is absurd. To work just to accumulate money and more money is still more absurd. The man who has allowed work to become his master, who cannot be happy away from work, is to be pitied. When a man spent his years till four score years have whitened his hair and then cannot be content to rest, or does not know how to rest, has lived mostly in vain — whatever else the writers of his obituary may have to say about it.

Abstracts.

FUNCTIONAL AND ORGANIC DIFFERENTIA IN NERVOUS DISEASES AS SHOWN BY CASES.

By Tom A. Williams, M. B., C. M., Edin.,
Washington, D. C.,

Lecturer on Nervous and Mental Diseases, Howard University.

(Read by invitation at the New York State Medical Association; New York State Medical Journal, September, 1916.)

A new nervous symptom in a neurotic patient should never be attributed to his neuroticism. It should be first thoroughly observed and analyzed, for it may be an index to organic diseases.

For instance, a nervous man who had been drinking was referred on account of a tremor which had been treated for three months by hydrotherapy without benefit. Proper examination showed it was not a neurotic tremor at all, and that there was dysergia, impairment of speech, exaggerated reflexes, sluggish pupils and diminished deep pain sense. Syphilis was diagnosed, confirmed by examination of spinal fluid.

In another case, in spite of negative laboratory findings, a diagnosis of insular sclerosis was rejected because of the absence in a grave case of all three important differentia as nystagmus, Babinski sign and white papilla.

Again, a diagnosis of psychasthenia by the family physician because of the fear of going out was rejected because there were absent such necessary differentia as obsession, monomania, anxiety, compulsive movement, scrupulosity, and sense of incompleteness; and the examination then showed the condition to be a vasomotor one.

It is by psychological criteria, that torticolis, facial grimace, or other tic is differentiated from spasm due to irritation of a reflex arc, as well as by the fact that the muscles involved are not innervated by a single nerve arc.

No neurotic condition should be diagnosed by exclusion; it is only by finding positive stigmata that one has a right to diagnose it.

UTERINE TUMORS.

J. B. Deaver, Philadelphia (Journal A. M. A., October 21, 1916), says that we have outgrown the older ideas as to the harmlessness of uterine fibromas and also the idea that if a woman could be tided along to the menopause it could be expected that the fibroids would then shrink and cease from troubling. He does not think that the treatment by the Roentgen ray that has been so much advocated has proved its worth. We all hoped for a time that an absolutely safe and specific remedial agency was in our reach. Now we have the claims of radium, and while Deaver is willing to grant that it has a certain direct effect, this is not specific. The Roentgen ray and radium have both a pronounced influence over malignant growths but he nevertheless considers it malpractice to use either in any case amenable to excision. Both methods are slow and expensive and he concludes that operation, by which the patient is rid completely and finally of the growths and associated pathology, remains the ideal treatment. The operation of choice, in his opinion, is supravaginal hysterectomy. An exception should be made when the cervix is distinctly

abnormal by reason of lacerations, ulceration, or inflammatory conditions, when the whole organ should be removed. Ovaries should always be left unless diseased, especially in younger women, when one ovary or a portion of it should be left unless the condition makes it dangerous to do so. It is his practice to fix the round ligament and the stump of the other portion into the cut surface of the cervix or, in the case of panhysterectomy, to the vagina on each side. Myomectomy is seldom advised, as the tumors are usually multiple and when single are apt to be so large as to render hopeless any attempt to save a functionally sound uterus. Occasionally in the case of young women it is justifiable, but it is well to remember that it may be a more complicated or dangerous operation than removal of the uterus. At times the operation of hysterectomy may come in service. It is impossible always to distinguish between a pregnant uterus and one symmetrically enlarged by a myoma. It is possible also by this method sometimes to expose a small bleeding polyp or submucous myoma. Deaver considers the operation for the fibroid tumor of the uterus one of the most satisfactory in all surgery. When cure is indicated, symptomatic treatment has no place.

Personals and News Items.

Dr. E. O. Underwood, of Waveland, visited in Little Rock last month.

Dr. Jacob B. McKnight, of Tinsman, visited in Little Rock last month.

Dr. Miles D. Kelly, of Carthage, visited in Little Rock last month.

Dr. Chas. S. Allen, of Haskell, Okla., visiter in Little Rock last month.

Dr. Albert W. Rye, of London, visited in Little Rock last month.

Dr. J. P. Runyan and Dr. H. H. Kirby, of Little Rock, have returned from the East.

Dr. and Mrs. C. Travis Drennen, of Hot Springs, visited in Little Rock last month.

Dr. C. R. Chesnutt, of Little Rock, attended the pediatric clinics in St. Louis last month.

Dr. E. Wyllys Andrews is the new chief of staff and surgeon-in-chief of Mercy Hospital, Chicago, succeeding Dr. John B. Murphy.

Dr. J. I. Scarborough, of Little Rock, was made a Fellow of the American College of Surgeons at a meeting of the Association last month in Philadelphia.

Doctor, please show your interest in our advertisers by sending them inquiries concerning their products, and mention the Journal of the Arkansas Medical Society.

Dr. W. F. Smith, division surgeon Iron Mountain and Southern Railway, announces the instalation of a new ten-kilowatt *x*-ray machine in St. Vincent's Infirmary, Little Rock.

Dr. W. A. Snodgrass and Dr. Frank Vinsonhaler, of Little Rock, attended the Clinical Congress of Surgeons and the annual meeting of the American College of Surgeons, October 23-29, at Philadelphia.

In this issue will be found a new advertisement of the Sacred Heart Sanitarium, Milwaukee. The neurologist of this institution is Dr. D. W. Roberts, formerly of the State Hospital for Nervous Diseases, Little Rock.

Dr. M. M. Smith, of Dallas, editor of the Texas medical News, announced recently the change in his journal to a national journal, which will be devoted to the interest of medical life insurance and health conservation.

Dr. Frank B. Young, who since his resignation as Superintendent of the State Hospital for Nervous Diseases, has been engaged in general practice in Little Rock, left last month with his family for Gering, Neb., to be located permanently.

MEDICAL CORPS OF THE UNITED STATES NAVY.

Legislation has recently been enacted which will provide for approximately 300 additional medical officers in the Medical Corps of the United States Navy.

The pay ranges from $2,000 a year, with quarters or an allowance therefor, for assistant surgeons with the rank of Lieutenant, Junior Grade, to $8,000 with allowance upon attaining the grade of Medical Director with the rank of Rear Admiral of the upper half.

Applicants must be between the ages of 21 and 32 years, citizens of the United States, and must submit satisfactory evidence of preliminary and medical education. The examination for appointment in the Medical Corps

consists of two stages, the first stage, securing appointment in the Medical Reserve Corps, and the second stage, securing an appointment as a commissioned officer in the regular Medical Corps.

After the candidate passes the preliminary examination he attends a course of instruction at the Naval Medical School. During this course he receives full pay and allowances of his rank, and at the end of the course he takes a final examination. Two of these courses begin each year, one commencing about the first of October, and the second course beginning early in February.

The examinations are held in several of the coast cities in the United States, both on the east coast and the west coast, and also at Chicago, Ill.

Literature describing the Navy as a special field for medical work, and circulars of information for persons desiring to enter the Medical Corps, may be obtained by addressing the Surgeon General, U. S. Navy, Navy Department, Washington, D. C.

New and Nonofficial Remedies.

Barium Sulphate for Roentgen Ray Work.—Barium sulphate freed from soluble barium salts. This salt passes through the system unchanged and, because of this, is used in taking Roentgen ray pictures of the stomach and the intestines.

Barium Sulphate-Squibb for Roentgen Ray Work.—A brand complying with the standards for barium sulphate for Roentgen ray work, N. N. R. E. R. Squibb & Sons, New York (Journal A. M. A., October 7, 1916, p. 1091).

Chlorazene Tablets, 4.6 Gr.—Each tablet contains 4.6 grains chlorazene (sodium paratoluenesulphochloramine). The Abbott Laboratories, Chicago (Journal A. M. A., October 21, 1916, p. 1229).

Propaganda for Reform.

Hydras.—The Council on Pharmacy and Chemistry reports that Hydras, sold by John Wyeth & Bro., is one of the so-called "uterine tonics," said to contain "cramp bark, helonias root, hydrastis, scutellaria, dogwood and aromatics" in unspecified amounts. While the name, taken in connection with the composition, suggests that hydrastis is an important constituent, the A. M. A. Chemical Laboratory found this drug to be present in unimportant amounts. The Council finds Hydras inadmissible to New and Non-official Remedies because its composition is semi-secret; because the recommendations on the label for its use in specified diseases, and the advertising accompanying the bottle are sure to lead to its ill-advised use by the public; because the claims made for its curative properties are exaggerated and unwarranted; because the name is misleading and because the combination of these five drugs, even if individually they were of therapeutic value, is irrational (Journal A. M. A., October 7, 1916, p. 1107).

Nuxated Iron.—Nuxated Iron is advertised in the newspapers with the claim that it is not a patent medicine or secret remedy. In the popular meaning of the words, "Nuxated Iron" is just as much a "patent medicine" as is "Peruna," "Lydia Pinkham's," or "Pierce's Favorite Prescription," Also, "Nuxated Iron" is essentially secret in composition. While the public is led to believe that the preparation consists chiefly of nux vomica and iron, analyses made in the A. M. A. Chemical Laboratory and elsewhere indicate that it contains much less than an ordinary dose of iron and practically no nux vomica. It is sold under claims that are both directly and inferentially false and misleading not only as regards its composition, but also as regards its alleged therapeutic effects. Nuxated Iron is also advertised in the Medical Brief, a publication which has for its editor the "medical expert" for the Wine of Cardui concern in the recent case against the American Medical Association and as its publisher one who, through the "National Druggist," has long been the mouthpiece of the "patent medicine" interests (Journal A. M. A., October 21, 1916, p. 1244).

Patent Medicines Prosecuted Under the Food and Drug Act.—The following information was brought out in connection with prosecutions by the Federal authorities under that portion of the Food and Drugs Act which provides penalties against misleading, false and unwarranted therapeutic claims: Radway's Ready Relief was claimed to relieve rheumatism, sore throat, pleurisy, pneumonia and other conditions. The government chemists found the preparation to be a hydroalcoholic solution of oleoresin of capsicum,

camphor and ammonia. Ingham's Vegetable Expectorant Nervine Pain Extractor was found to contain alcohol 86 per cent, opium alkaloids, camphor, capsicum and vegetable extractive matter. It was claimed that this morphine mixture was not only safe and harmless, but positively beneficial when given to teething children. Tetterine was said to be a marvelous remedy for tetter, eczema, etc. Maignen Antiseptic Powder according to government chemists is composed essentially of calcium carbonate, borax, aluminum sulphate and sodium carbonate. Among other things the exploiters of this powder, which at one time was advertised to the medical profession, tried to persuade the public that the preparation would "sterilize" the stomach, throat, nose, lungs, etc. Green Mountain Oil or Magic Pain Destroyer was found to consist essentially of 95 per cent linseed oil, with oil of sassafras, oil of thuja, and oil of turpentine, with possibly small amounts of camphor. According to the claims made on the trade package, this stuff was said to be "A Remedy for Diphtheria, Croup, Deafness and Sore Eyes, Rheumatic Pains, Stiff Joints, Pains in the Back" and many other ailments. Mrs. Joe Person's Remedy was found to be a slightly sweetened water-alcohol solution of vegetable drugs with a minute trace of alkaloids and the presence of podophyllin and sarsaparilla indicated. The preparation was claimed to cure such things as "blood poison," eczema, malaria and pellagra. Tutt's Pills were found to consist mainly of sugar, aloes, starch and calomel. The nostrum was sold under claims to the effect that it was "a remedy for intermittent and remittant fevers, dropsy, dysentery, diseases of the kidneys and bladder," and a number of other conditions (Journal A. M. A., October 28, 1916, pp. 1316-1317).

Obituary.

Dr. J. W. Webster.—Dr. J. W. Webster, of Siloam Springs, age 69, died at his home, October 23, 1916. He is survived by his wife and four children.

Dr. Webster was the highest type of gentleman, of splendid characteristics. Endowed with a refined poetic sentiment, and was an excellent citizen in every way.—J. T. C.

County Societies.

FRANKLIN COUNTY.

(Reported by Dr. Thos. Douglas, See'y.)

The Franklin County Medical Society held its regular meeting at Ozark, October 10. In the absence of the president, Dr. Harrod presided. There were present Drs. Blackburn, Warren, Williams, Porter, Davis, and Douglass. There were some interesting case reports, viz.: A case of facial paralysis in a girl of thirteen years; a case of sarcoma of the throat in a boy of seven years, with death from asphyxia, after a little more than a month from the time the tumor was first noticed; a case of appendicitis with operation and recovery; an obscure case of malarial infection and another case of malaria with semi-comatose condition. The subject of medical economies was discussed, introduced by Dr. Harrod. This meeting was held one week later than the regular time on account of the meeting at Fort Smith of the Medical Association of the Southwest, which was attended by a good many of our members.

The committee appointed at Branch last month submitted the following report:

"With deep regret and sorrow your committee have to chronicle the death of our brother, Dr. William Waldo Rambo. He was born in the year 1853, at White Cottage, Ohio, near Zanesville. He was reared on a farm, took his medical degree in 1878, at the University of Louisville, Medical Department, and practiced medicine six years in Manchester, Ohio. From there he moved to Arkansas, where he practiced about thirty-two years until called by death on the sixteenth day of July, 1916. He was a man of fine physical mould, which served him well through all the long years of strenuous labor incident to a general practice. He was loyal and true to a genuine medical brother, but had little patience with a pretender. He was a charter member of the reorganized Franklin County Medical Society and a faithful attendant and worker until the close of his useful medical life. It was the pleasure of your chairman to meet Dr. Rambo often at the bedside of the sick, and I always found him courteous, resourceful and ready to do his full share of work and to assume a brotherly share of responsibility.

H. H. Turner, *Chairman,*
Thos. Douglass,
E. W. Blackburn,
Committee.

ARKANSAS COUNTY.

(Reported by Dr. M. C. John, See'y.)

The Arkansas County Medical Soeiety met in Stuttgart, Oetober 10, 1916.

Members present: Drs. Hill, Moorhead, Hayward, Fowler, Sillin, Swindler and John. Dr. Dobbins, of Humphrey was a visitor.

Dr. Moorhead read a paper on "Antitoxin in Membranous Croup" (so-called). The cases reported in his paper had no visible diphtheritic membrane and no Klebs Loffler bacillus was found in smears from throat. Those treated without diphtheritie antitoxin were mostly fatal, while those reeeiving the antitoxin all reeovered.

This being our annual meeting, the following were eleeted officers for the ensuing year:

Dr. E. B. Swindler, president, Stuttgart.

Dr. A. Fowler, vice president, Humphrey.

Dr. M. C. John, secretary and treasurer, Stuttgart.

Dr. B. L. Hill, delegate to State Soeiety, Stuttgart.

Dr. W. H. Moorhead, alternate, Stuttgart.

Dr. W. H. Moorhead, Censor, three years.

The next meeting of the Soeiety will be January 9, 1917.

INDEPENDENCE COUNTY.

(Reported by Dr. Paul H. Jeffery, Sec'y.)

Bethesda, Oct. 31.—The regular monthly meeting of the Independenee County Medieal Soeiety was held at the eourt house in Batesville Monday night.

The objeet of the Assoeiation in its regular meetings is to assist one another in the diseussion of eases coming under the individual observation and praetiee, thereby rendering better serviee to the publie.

Dr. Gray, of Batesville, president of the Soeiety, presided, and in the absenee of the secretary, Dr. Jeffery, of Bethesda, Dr. C. G. Hinkle served.

Members of the Soeiety present were Drs. Frank A. Gray, J. W. Case, W. B. Lawrenee, R. C. Dorr, O. J. T. Johnston, M. S. Craig, and C. G. Hinkle, of Batesville; L. T. Evans, Mt. Pleasant; Dr. King, Jamestown; O. L. Bone, of Cushman; Long and Robertson, of Sulphur Roek; McAdams, of Cord; Paul Hayden, Bethesda; W. A. Wyatt, Rosie.

Interesting papers were read by Drs. Robertson, Evans, McAdams, Hayden and Hinkle.

At the conelusion of the program the Soeiety adjourned to meet the seeond Monday night in Deeember.

Book Reviews.

Practical Massage and Corrective Exercise.—By Hartvig Nisser. Revised and enlarged edition of the author's "Practical Massage in Twenty Lessons," with many additions; 68 original illustrations, including several full page halftone plates. Published by F. A. Davis Company, Philadelphia, Pa. Price, $1.50 net.

This book gives the result of what the author's forty years of study and experienee, practice and teaching have taught him, in practical massage and eorreetive exercise.

The Practical Medicine Series.—Comprising of ten volumes on the year's progress in medicine, in charge of Chas. L. Mix, A. M., M. D. Each volume being complete on the subject of which it treats for the year prior to its publication. Price of the series of ten volumes, $10.00, Series 1916. Volume I, General Medicine, edited by Frank Billings, M. S., M. D.; price, $1.50. Volume II, General Surgery, edited by John B. Murphy, A. M., M. D.; price, $2.00. Volume III, The Eye, Ear, Nose and Throat, edited by C. A. Wood, M. D., A. H. Andrews, M. D., and G. E. Shambaugh, M. D.; price, $1.50. Published by the Year Book Publishers, 327 South La Salle Street, Chicago.

Ultra-Violet Light.—By means of the Alpine Sun Lamp. Treatment and Indications. By Hugo Bach, M. D., Bad Elster, Saxony, Germany. Authorized translation from the German. Published by Paul B. Hoeber, 67-69 East Fifty-ninth Street, New York. Price, $1.00.

This book gives a description of the Alpine Sun Lamp, the Ultra-Violet light and its use, with other information of mueh value to those interested in this form of treatment.

Diseases of the Digestive Tract and Their Treatment.—By A. Everett Austin, A. M., M. D., Assistant Professor of Clinical Medicine, in charge of dietetics and gastro intestinal diseases, Tufts College. With eighty-five illustrations, including ten color plates. Published by C. V. Mosby Company, St. Louis, Mo., 1916. Price, $6.50.

The author of this splendid volume gives in a elear fashion the faets pertaining to the digestive tract. Attempt has also been made to show the eorrelation of the diseases of the stomaeh and intestines with those of other organs—as for instanee, pulmonary tubereulosis, pernieious anemia, and nephritis. He also shows that every suecessful diagnosis depends on, first, history; second, physical examination; third, chemieal analysis; and fourth, radiology—without expressing any great confidenee in either one when taken alone.

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THE JOURNAL OF THE Arkansas Medical Society

Owned and Published Monthly by the Arkansas Medical Society

VOLUME XIII
No. 7

LITTLE ROCK, DECEMBER, 1916

Yearly Subscription $1.00
Single Copy 25c

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THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIII. LITTLE ROCK, ARK., DECEMBER, 1916 No. 7

Original Articles.

A CASE OF SPLENECTOMY.*

By W. F. Smith, M. D., F. A. C. S.,
Little Rock.

This patient, K. R. D., is an inmate of the State Hospital for Nervous Diseases, where he has been under observation since December 10, 1912. The writer's connection with the case dates from August 9, 1915, when a splenectomy was performed.

On December 12, 1912, a physical examination showed this patient to be a man apparently thirty-eight years of age, of medium stature, well proportioned, clean and neatly dressed. Complexion medium. There were no permanent stigmata. The head and lungs were entirely negative. The abdomen was negative to superficial examination, although the patient complained of obstipation and recently there had been a slight sense of constriction as a girdle sensation.

There was no evidence of leuetic infection, and venereal history was denied. The pupils and patellar reflexes were entirely negative and a thorough examination failed to reveal any evidence of organic brain or cord disease. However, there were subjective symptoms which pointed to cord trouble. For a period of six weeks or two months the patient had been conscious of numbness in the extremities. He first noticed a peculiar numbness in his hands which gradually extended to the elbows. The same condition immediately developed in the feet. The patient complained that in walking there was not the proper sensation in the impact between his soles and side-walk. As he put it, there was at times a lack of any sensation and a sort of numbness which was so pronounced at times that he was not conscious that he had feet so far as organic sensation was concerned.

The condition gradually extended up the extremities until it reached the waist line, and he then began to complain of distension and a slight pain in the abdomen. This pain was consequent upon his intractible constipation, as this pain usually disappeared after complete evacuation of the bowels. The girdle sensation also practically disappeared after evacuation, although a suggestion of this sensation persisted all the time. There was never pain in the extremities up to this time. Pain and tactual sensibilities thus far had not been disturbed.

He appeared to be losing power in the extremities. Dynamometer reading in the left hand was 30; in the right hand, 50 kg. There was no static ataxia and no spasticity. The patient could walk a line without difficulty. There was no disturbance in speech, but it was noticed that he wrote with great difficulty, writing in a stiff, labored hand, whereas a month previous he wrote bold strokes. There was a slight tremor and the finer movements, such as inserting a collar button and buttoning his clothes, were done with the greatest difficulty and were provocative of irritable outbursts of anger.

About two weeks prior to his admission to the hospital the patient was found unconscious in his room, suffering from an overdose of opium. After he had been resusitated he stated that he had taken a large dose of opium with suicidal intent. Within twenty-four hours after the suicidal attempt he seemed quite rational and readily consented to the arrangements to have him brought to the hospital. His mental depression rapidly disappeared and there was but one recurrence, which lasted but a few hours.

In regard to his mental status, he seemed to be entirely clear mentally. Apparently he was an active, energetic sort of a fellow all of his life, and to him the fear of becoming a

*Read before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2, 3 and 4, 1916.

hopeless invalid was greater than he could bear, and on an earlier date he had stated unhesitatingly that he would rather be out of the world than live as an invalid.

This patient's occupation was varied, extending from that of a railroad man to preacher. The provisional diagnosis was multiple sclerosis.

On March 7, 1913, the patient having recovered from his temporary mental depression, he was discharged as a patient, but continued to remain in the institution, being employed in various capacities about the office. On October 8, 1913, he was again admitted as a patient, it being noted that in the latter part of June he began to fail noticeably, and early in July his condition became such that it was necessary for him to go to bed. He continued to fail progressively until the last few days of July, when his life was despaired of. On the first of August, however, there was noticed a slight change and he began to gradually improve; however, the improvement was very slow. The diagnosis at this time was pernicious anemia with multiple selerosis.

On June 11, 1914, the patient was allowed to visit the city, although at this time he was uncertain on his feet, but had sufficient intelligence to care for himself. That night he failed to return and the next morning was found lying beside the street car tracks in Baring Cross, apparently under the influence of a narcotic drug. He was immediately returned to the institution. On October 9, 1914, the patient left the hospital for a couple of days and on February 7, 1915, was paroled for six months as improved. It appeared, however, that he was unable, either physically or mentally, to attend to any duties, and he became progressively more incapacitated and returned to the hospital April 29, 1915, and has remained there since.

As noted above, his spleen was removed August 9, 1915. The spleen weighed one and a half pounds and was removed without the loss of more than one drachm of blood. There was an uneventful recovery, except an incontinence of both bowels and bladder, which persisted about ten days. During the progress of this case there was no enlargement of the lymphatic glands, but there was pain along the large nerve trunks, especially the right sciatic. There was also at times pain in each tibia. There was a rapid pulse. There was emaciation. There was no drowsiness, but slept about eight hours in twenty-four hours. Following the operation, his resistance was good, as is shown by the increase in leucocytes. There was no cirrhosis of the liver or ascites.

It should be mentioned that this patient was addicted to the liquor and various drug habits. In my judgment, this case is one of pernicious anemia and the disseminated sclerosis and mental condition are due to that condition and the former are not independent factors. This patient's mental condition was an infection exhaustion psychosis. The neurology is that of a disseminated sclerosis due to an impoverished blood stream, there being an involvement of the lower motor neurons, and there would probably be found in the motor tracts of the cords sclerotic patches.

The physical condition may be determined from the blood picture. Following the splenectomy, as the blood picture improves, so also is there noted an improvement in the above condition, and there is now an arrest in the pathology. If the chemistry of the blood be changed, the volume reduced or the velocity decreased, then there follows, necessarily, an impairment, to a more or less extent, of the physiologic performance, especially of the higher developed special organs due, first, to an insufficient nourishment of the cells, and second, to the accumulation of the broken-down waste products.

The patient's present mental condition seems to be normal. His disposition is happy and his outlook optimistic. His physical condition has improved to the extent that he is able to walk around with the aid of crutches.

It is regretted that an interne of the institution ordered his spleen buried, consequently no report on the condition of this spleen was possible.

The writer wishes to express his appreciation to Drs. F. B. Young and E. P. Bledsoe, superintendents, for the opportunity to observe this patient, and the data furnished.

This patient will be kept under observation and a supplemental report made later. Following are the pathological examinations found in this case:

December 16, 1912.
Wassermann: Negative.

December 21, 1912.

BLOOD EXAMINATION: Hemiglobin, 40 per cent; erythrocytes, 2,490,000; leucocytes, 6,690.

DIFFERENTIAL COUNT: Polymorphoneuclears, 70 per cent; small mononeuclears, 21 per cent; large mononeuclears, 3 per cent; eosinophiles, 5 per cent.

July 8, 1913.
While an employe of the institution.

Blood Examination: Hemiglobin, 33 per cent; erythrocytes, 1,470,000; color index, 1.2; leucocytes, 2,900.

Differential Count: Polymorphoneuclears, 53 per cent; lymphocytes, 46 per cent; eosinophiles, 2,900.

Poikilocytosis: Macrocytes, microcytes, polychromatophilia granular degeneration.

No normoblasts found.

Urinalysis: Specific gravity, 1,008; reaction, acid; color, straw; albumin, negative; sugar, negative; indican, negative. microscopical examination, negative.

July 12, 1913.

Blcod Examination: Hemiglobin, 32 per cent; erythrocytes, 1,140,000; color index, 1.4; leucocytes, 5,200. Polychromatophilia, granular degeneration, poikoilocytes, macrocytes, microcytes; 2 megaloblasts found.

July 22, 1913.

Blood: Hemiglobin, 30 per cent; erythrocytes, 1,480,000; color index, 1; leucocytes, 2,200; macrocytes, microcytes, 1 normablast, polychromatophilia poikilocytosis.

July 28, 1913.

Blood: Hemoglobin, 27 per cent; erythrocytes, 830,000; color index, 1.7; leucocytes, 1,680; macrocytes, microcytes, polychromatophilia, marked poikilocytosis.

July 31, 1913.

Blood: Hemiglobin, 25 per cent; erythrocytes, 880,000; color index, 1.8; leucocytes, 1,800; macrocytes, microcytes, polychromatophilia, marked poikilocytosis.

August 2, 1913.

Blood: Hemoglobin, 32 per cent; erythrocytes, 1,360,000; leucocytes, 2,000.

August 5, 1913.

Blcod Examination: Hemoglobin, 38 per cent. erythrocytes, 1,830,000; color index, 1; leucocytes, 1,600.

Two years. August 11, 1913.

Blood Examination: Hemoglobin, 49 per cent; erythrocytes, 2,410,000; color index, 1; leucocytes, 3,980; very few macrocytes and microcytes; no poikilocytes or normablasts.

August 11, 1913.

Blood: Hemoglobin, 49 per cent; erythrocytes, 2,410,000; color index, 1; leucocytes, 3,980; very few macrocytes and microcytes; no poikilocytes or normablasts.

August 21, 1913.

Blood Examination: Erythrocytes, 3,150,000; hemoglobin, 62 per cent; leucocytes, 5,800; color index, 1.

September 5, 1913.

Blood Examination: Erythrocytes, 3,520,000; hemoglobin, 70 per cent; leucocytes, 5,200. color index, 1.

October 25, 1913.

Blood Examination: Erythrocytes, 3,620,000; hemoglobin, 75 per cent (Tallquist); leucocytes, 5,000; color index, 1.

Differential Count: Lymphocytes, 51 per cent; large mononeuclears, none; transitionals, none; polymorphoneuclears, 49 per cent; eosinophiles, none; basophilies, none; myelocytes, none; normablasts, two found.

December 31, 1913.

Blood Examination: Erythrocytes, 2,400,000; hemoglobin, 48 per cent; color index, 1; leucocytes, 6,000.

Differential Count: Pymphocytes, 24 per cent; large mononeuclears, 2 per cent; transitionals, none; polymorphoneuclears, 75 per cent; eosinophilies, 1 per cent; basophilies, none.

January 14, 1914.

Blood Examination: Erythrocytes, 1,970,000; hemoglobin, 38 per cent; color index, 1; leucocytes, 7,600.

January 27, 1914.

Blood Examination: Erythrocytes, 1,730,000; hemoglobin, 34 per cent; color index, 1; leucocytes, 5,600.

February 6, 1914.

Blood Examination: Erythrocytes, 1,550,000; hemoglobin, 30 per cent; color index, 1; leucocytes, 6,000.

February 20, 1914.

Blood Examination: Erythrocytes, 1,230,000; hemoglobin, 30 per cent; color index, 1.2; leucocytes, 5,400.

March 10, 1914.

Erythrocytes, 1,100,000; hemoglobin, 30 per cent; color index, 1.3; leucocytes, 5,200.

March 16, 1914.

URINALYSIS.

Physical and Chemical: Appearance, normal; color, straw; reaction, acid; specific gravity, 1,020; indican, trace; protein, small amount; nature of protein, serum albumin; sugar, none.

Microscopic: Casts, few granular; leucocytes, few; mucus, few shreds.

March 17, 1914.

Blood Examination: Erythrocytes, 1,150,000; hemoglobin, 22 per cent; color index, 1; leucocytes, 3,600.

Differential Count: Lymphocytes, 42 per cent; large mononeuclears, 2 per cent; transitionals, none; polymorphoneuclears, 56 per cent; eosinophiles, none; basophiles, none; myelocytes, none; polychromatophilia, present; poikilocytosis, marked; macrocytes, many; microcytes, many; normablasts, many; megaloblasts, few.

April 6, 1914.

URINALYSIS.

Physical and Chemical: Appearance, normal; transparency, not reported; color, straw; reaction, acid; specific gravity, 1,020; indican, none; protein, none; sugar, none.

Microscopic: Casts, granular; leucocytes, many; mucus, shreds.

April 18, 1914.

Blood Examination: Erythrocytes, 2,820,000; hemoglobin, 56 per cent; leucocytes, 6,200; color index, 1.

May 7, 1914.

Erythrocytes, 2,990,000; hemoglobin, 58 per cent; color index, 1; leucocytes, 5,800.

Differential Count: Lymphocytes, 27 per cent; large mononeuclears, none; transitionals, none; poly-

morphoneuclears, 72 per cent; eosinophiles, 1 per cent; basophiles, none.

BLOOD EXAMINATION: Erythrocytes, 2,500,000; hemoglobin, 50 per cent; color index, .1; leucocytes, 6,800.

January 29, 1915.

SPUTUM EXAMINATION: Character of sputum, tenaceous; B. tuberculosis, none; other bacteria, large number of influenza bacilli; erythrocytes, present; pus cocci, few present; pus cells, few present.

May 4, 1915.

URINALYSIS.

PHYSICAL AND CHEMICAL: Appearance, normal; transparency, clear; color, dark straw; reaction, acid; specific gravity, 1,020; indican, trace; protein, none; sugar, none.

MICROSCOPIC: Cylindroids, present; epithelium, squamous.

May 1, 1915.

BLOOD EXAMINATION: Erythrocytes, 1,455,000; hemoglobin, 35 per cent; color index, 1.4; leucocytes, 3,466.

DIFFERENTIAL COUNT: Lymphocytes, 29 per cent; large mononeuclears, 2 per cent; transitionals, none; polymorphonuclears, 69 per cent; eosinophiles, none; basophiles, none; basophiles degeneration, present; polychromatophila, present; poikilocytosis, present; macrocytes, present; microcytes, present; normablasts, present; megaloblasts, present.

May 13, 1915.

Erythrocytes, 1,690,000; hemoglobin, 33 per cent; color index, 1 plus; leucocytes, 6,266.

DIFFERENTIAL COUNT: Basophilic degeneration, present; polychromatophila, present; poikilocytosis, present; macrocytes, present; microcytes, present; normablasts, present; megaloblasts, present.

May 17, 1916.

SPUTUM EXAMINATION: B. Tuberculosis, none; other bacteria, streptococci many; pus cells, large number.

June 1, 1915.

BLOOD EXAMINATION: Erythrocytes, 2,040,000; hemoglobin, 45 per cent; color iudex, 1 plus; leucocytes, 6,420.

June 17, 1915.

Erythrocytes, 1,280,000; hemoglobin, 40 per ceut; color index, 1.6; leucocytes, 5,288.

Three weeks, July 21, 1915.

Erythrocytes, 1,800,000; hemoglobin, 35 per cent; color index, 1; leucocytes, 4,066.

DIFFERENTIAL COUNT: Lymphocytes, 16 per cent; endothelial leucocytes, 4 per cent; polymorphonuclears, 80 per cent; eosinophiles, none; basophiles, none; basophilic degeneration, present; polychromatophila, present; poikilocytes, present; macrocytes, present; microcytes, present; normablasts, present; megaloblasts, present.

July 22, 1915.

URINALYSIS.

PHYSICAL AND CHEMICAL: Appearance, normal; transparency, clear; color, yellow; reaction, acid; specific gravity, 1,020; indican, small amount; bile, about .0025 present; protein, none; sugar, none.

MICROSCOPIC: Cylindroids, present; leucocytes, present; crystals, amorphous urates; mucus, present.

August 10, 1915.

BLOOD EXAMINATION: Erythrocytes, 2,510,000; hemoglobin, 45 per cent; color index, .9; leucocytes, 7,520.

DIFFERENTIAL COUNT: Lymphocytes, 19 per cent; endothelial leucocytes, 2 per cent; polymorphoneuclears, 79 per cent; basophilic degeneration, present; polychromatophila, present; poikilocytosis, present; normablasts, present; megaloblasts, present.

August 11, 1915.

Erythrocytes, 2,750,000; hemoglobin, 45 per cent; color index, .8; leucocytes, 13,932.

DIFFERENTIAL COUNT: Lymphocytes, 14 per cent; endothelial leucocytes, 4 per cent; polymorphonuclears, 82 per cent; polychromatophila, present; poikilocytosis, present; macrocytes, present; microcytes, present; normablasts, present.

August 12, 1915.

Erythrocytes, 2,500,000; hemoglobin, 50 per cent; color index, 1; leucocytes, 15,866.

DIFFERENTIAL COUNT: Lymphocytes, 16 per cent; endothelial leucocytes, 3 per cent; polymorphonuclears, 80 per cent; eosinophiles, 1 per cent; basophilic degeneration, present; poikilocytosis, present; macrocytes, present; microcytes, present; normablasts, present; remarks, normablasts more numerous than yesterday.

August 13, 1915.

BLOOD EXAMINATION: Erythrocytes, 2,035,000; hemoglobin, 45 per cent; color index, 1 plus; leucocytes, 9,200.

DIFFERENTIAL COUNT: Lymphocytes, 20 per cent; endothelial leucocytes, 4 per cent; polymorphonuclears, 75 per cent; eosinophiles, 1 per cent; basophiles degeneration, present; poikilocytosis, present; macrocytes, present; microcytes, present; normablasts, present.

August 14, 1915.

Erythrocytes, 2,810,000; hemoglobin, 50 per cent; color index, .9; leucocytes, 11,910.

DIFFERENTIAL COUNT: Lymphocytes, 16 per cent; transitionals, 2 per cent; polymorphonuclears, 82 per cent; eosinophiles, none; basophilic degeneration, present; poikilocytosis, present; macrocytes, present; microcytes, present; normablasts, present.

August 15, 1915.

Erythrocytes, 2,610,000; hemoglobin, 47 per cent; color iudex, .9; leucocytes, 7,840.

DIFFERENTIAL COUNT: Lymphocytes, 17 per cent; endothelial leucocytes, 2 per cent; polymorphonuclears, 79 per cent; eosinophiles, 2 per cent; basophiles, none; basophilic degeneration, present; poikilocytosis, present; macrocytes, present; microcytes, present; normablasts, present.

August 16, 1915.

Erythrocytes, 2,430,000; hemoglobin, 40 per cent; color index, .9; leucocytes, 7,420.

DIFFERENTIAL COUNT: Lymphocytes, 24 per cent; endothelial leucocytes, 2 per cent; polymorphonuclears, 70 per cent; eosinophiles, 4 per cent; basophilic degeneration, present; poikilocytosis, present; macrocytes, present; microcytes, present; normablasts, present.

August 17, 1915.

BLOOD EXAMINATION: Erythrocytes, 2,620,000; hemoglobin, 50 per cent; color index, .9; leucocytes, 10,880.

DIFFERENTIAL COUNT: Lymphocytes, 17 per cent; endothelial leucocytes, 3 per cent; polymorphonuclears, 79 per cent; eosinophiles, 1 per cent; basophilic degeneration, present; poikilocytosis, present; macrocytes, present; microcytes, present; normablasts, present.

August 18, 1915.

Erythrocytes, 2,730,000; hemoglobin, 50 per cent; color index, .9; leucocytes, 11,000.

DIFFERENTIAL COUNT: Lymphocytes, 23 per cent; endothelial leucocytes, 1 per cent; polymorphonuclears, 75 per cent; eosinophiles, 1 per cent; basophilic degeneration, present; poikilocytosis, present; macrocytes, present; microcytes, present; normablasts, present.

August 19, 1915.

Erythrocytes, 2,620,000; hemoglobin, 50 per cent; color index, .9; leucocytes, 10,554.

DIFFERENTIAL COUNT: Lymphocytes, 15 per cent; transitionals, 3 per cent; polymorphonuclears, 78 per cent; eosinophiles, 7 per cent; basophiles, none; basophilic degeneration, present; poikilocytosis, very slight; macrocytes, few present; microcytes, few present; normablasts, few present; remarks, normablasts not so numerous.

August 20, 1915.

Erythrocytes, 2,490,000; hemoglobin, 50 per cent; color index, 1 plus; leucocytes, 13,280.

DIFFERENTIAL COUNT: Lymphocytes, 22 per cent; polymorphonuclears, 74 per cent; eosinophiles, 4 per cent; basophilic degeneration, present; poikilocytosis, present; macrocytes, present; microcytes, present; normablasts, present.

August 19, 1915.

BLOOD EXAMINATION: Erythrocytes, 2,550,000; hemoglobin, 50 per cent; color index, 1; leucocytes, 8,960.

DIFFERENTIAL COUNT: Lymphocytes, 30 per cent; endothelial leucocytes, 1 per cent; polymorphonuclears, 68 per cent; eosinophiles, 1 per cent; basophilic degeneration, present; poikilocytosis, present; macrocytes, present; microcytes, present; normablasts, present.

September 2, 1915.

Erythrocytes, 2,360,000; hemoglobin, 50 per cent; color index, 1 plus; leucocytes, 12,160.

DIFFERENTIAL COUNT: Lymphocytes, 22 per cent; endothelial leucocytes, 4 per cent; polymorphonuclears, 73 per cent; eosinophiles, 1 per cent; basophiles, none; poikilocytosis, present; macrocytes, present; microcytes, present; normablasts, present.

September 7, 1915.

Erythrocytes, 2,390,000; hemoglobin, 50 per cent; color index, 1 plus; leucocytes, 8,622.

DIFFERENTIAL COUNT: Lymphocytes, 29 per cent; polymorphonuclears, 70 per cent; eosinophiles, 1 per cent; poikilocytosis, present, slight; macrocytes, present; microcytes, present; normablasts, few.

September 15, 1915.

Erythrocytes, 2,720,000; hemoglobin, 52 per cent; color index, .9; leucocytes, 7,360.

DIFFERENTIAL COUNT: Normablasts, few.

September 22, 1915.

BLOOD EXAMINATION: Erythrocytes, 2,780,000; hemoglobin, 45 per cent; color index, .8; leucocytes, 9,822.

September 28, 1915.

Erythrocytes, 2,780,000; hemoglobin, 50 per cent; color index, .9; leucocytes, 10,832.

DIFFERENTIAL COUNT: Macrocytes, few; normablasts, few.

October 4, 1915.

Erythrocytes, 2,860,000; hemoglobin, 50 per cent; leucocytes, 9,488; color index, .8.

October 14, 1915.

Erythrocytes, 3,040,000; hemoglobin, 50 per cent; color index, .8; leucocytes, 7,175.

October 20, 1915.

Erythrocytes, 2,810,000; hemoglobin, 50 per cent; color index, .9; leucocytes, 10,776.

November 2, 1915.

Erythrocytes, 3,200,000; hemoglobin, 55 per cent; color index, .8; leucocytes, 9,266.

November 10, 1915.

URINALYSIS.

PHYSICAL AND CHEMICAL: Appearance, normal; transparency, clear; color, straw; reaction, acid; specific gravity, 1,025; indican, small amount; protein, none; sugar, none.

MICROSCOPIC: Leucocytes, few; bacteria, present; mucus, few shreds.

November 16, 1915.

BLOOD EXAMINATION: Erythrocytes, 2,930,000; hemoglobin, 52 per cent; color index, .9; leucocytes, 8,266.

November 30, 1915.

Erythrocytes, 2,670,000; hemoglobin, 50 per cent; color index, .9; leucocytes, 12,822; malaria, negative.

DIFFERENTIAL COUNT: Macrocytes, present.

December 14, 1915.

Erythrocytes, 3,060,000; hemoglobin, 55 per cent; color index, .9; leucocytes, 8,154.

December 27, 1915.

Erythrocytes, 2,780,000; hemoglobin, 50 per cent; color index, .9; leucocytes, 8,910.

January 10, 1916.

Erythrocytes, 3,070,000; hemoglobin, 55 per cent; color index, .9; leucocytes, 12,822.

January 24, 1916.

Erythrocytes, 2,532,000; hemoglobin, 50 per cent; color index, 1; leucocytes, 12,976.

February 8, 1916.

Erythrocytes, 2,990,000; hemoglobin, 50 per cent; color index, .8; leucocytes, 11,200.

February 22, 1916.

Erythrocytes, 2,630,000; hemoglobin, 50 per cent; color index, .9; leucocytes, 10,866.

March 6, 1916.

BLOOD EXAMINATION: Erythrocytes, 3,280,000; hemoglobin, 55 per cent; color index, .8; leucocytes, 13,622.

March 20, 1916.

BLOOD EXAMINATION: Erythrocytes, 3,050,000; hemoglobin, 55 per cent; color index, .9; leucocytes, 13,376.

April 17, 1916.

BLOOD COUNT: Erythrocytes, 3,260,000; hemoglobin, 57 per cent; color index, .8; leucocytes, 11,132.

NOTE.—On December 9, 1916, a blood examination showed erythrocytes 3,600,000; leucocytes 9,000, hemoglobin 70 per cent, color index .8, physical condition good.

DISCUSSION.

Dr. F. B. Young (Little Rock): Having known the case, I will presume to open the discussion. The case was under my charge at the time Dr. Smith operated on it, and I think that his nervous and mental lesions were largely due to pernicious anemia. That is a question that is still under discussion.

There was quite an article in The Journal of the American Medical Association a short time ago as to whether these conditions were primarily due to pernicious anemia, or whether they were due to an essential nervous lesion.

This man is still alive. I saw him a few days ago, in excellent health.

I have seen quite a number of cases die from pernicious anemia. In fact, this is the only one I have ever had under my observation that is now living, and I believe that splenectomy offers the only possibility of any help in these cases.

Dr. Allen E. Cox (Helena): I enjoyed the paper very much and I haven't anything to add to it so far as splenectomy is concerned. One of the first cases I had after I began the practice of medicine was one of pernicious anemia; it made some lasting impressions on me and I look on the subject with a great deal of interest. I remember in this case I followed out the plan of treatment as suggested by Osler, which was, in the main, Fowler's solution of arsenic in increasing doses. I carried the dose to twenty-three drops tertio id diem and my patient improved steadily, gaining weight, and to all appearances led me to believe that she was recovering; but two or three years later she had a return of the trouble and died.

Sajou's article in his latest work is the very last word on the subject of pernicious anemia and I read his article very recently with more than passing interest, but after I had read what he had to say, I concluded that he had not added very much to our store of knowledge on this subject; however, his knowledge of this subject is about the most comprehensive we have and his article is well worth anyone's time to peruse it. Lane makes the statement that in some cases arsenic will cure, others it will benefit for a time. I have wondered why someone had not used salvarsan, because it certainly is the best form of arsenic when large doses are needed and it seems that the more arsenic these cases get, the better they get along. Dr. Smith's paper was a very interesting and instructive one and the results attained should satisfy him or anyone; the proof of the pudding is in the eating.

Dr. George B. Fletcher (Little Rock): I want to consider this paper from a neurological standpoint only. I was familiar with this case, which Dr. Smith just reported, for over two years, and I took the opportunity several times to examine him thoroughly from a neurological standpoint.

It seems to me that it makes no difference whether or not the neurological symptoms are due to disseminated sclerosis, syphilis, or what. So long as you have them, and have enough involvement to make a differential diagnosis of any certain neurological or nervous disease, that diagnosis should stand just as well as the diagnosis made from the blood picture. He had a definite diagnosis of pernicious anemia from the blood picture; yet, at the same time, he had definite symptoms to point to disseminated areas of sclerotic involvement in the tissues of the nervous system. So, I can see no good reason why a diagnosis of disseminated sclerosis should not stand, so long as the symptoms are present. I haven't seen him lately, and I don't know whether or not they are present now, but we all know that disseminated sclerosis has a tendency to get better and worse from time to time.

The question of lower motor neuron involvement, which he mentioned in his paper, is rather new to me in this case, because, on the number of examinations I made of the case, I saw no evidence of lower motor neuron involvement. He had more sensory neuron involvement, which is not motor, on each examination I made, than he did have of motor neuron involvement, placing it out of the motor tract and in the sensory tract. The sensory tracts which were most involved were the tracts which conducted the special sense of pain, tactile sensibility, and the sensibility to heat and cold. Sensibility for equilibration and muscular sense of position were not so disturbed as the others I mentioned. So, I think, if we are going to name any one type of involvement such as was named, lower motor neuron involvement, we should also consider the sensory neuron involvement, which was, when I examined him, much more in evidence than the motor neuron involvement. In lower motor neuron involvement we would expect to find atrophy; absent or diminished reflexes; no signs of pyramidal tract involvement such as Gorden, Babinski and Oppenheim; flaccidity and reaction of degeneration.

Dr. R. C. Dorr (Batesville): Dr. Smith said that he wants to make another report. From that, I understand the case is not well. It strikes me that Mr. Lane is right, that he may have operated on the wrong organ. Mr. Lane drained that alimentary canal. It may be fortunate for him that that spleen was buried, and no microscopic examination made.

In regard to Dr. Young, he said this patient was living. That might be explained because he passed out of his hands. (Laughter.)

Dr. Smith (closing): The fact remains impossible of being controverted, that prior to the operation this man's blood picture showed 888,000 red blood cells, and subsequent to the operation the red cells increased to over 3,000,000.

In reference to a supplementary report, I had in mind that after the patient died, if he was still under observation, that an endeavor would be made to get hold of the cord and determine the pathological condition. My contention is that a multiple sclerosis is present, but secondary; and that the pernicious anemia, on account of the impoverished condition of the blood not furnishing proper nourishment to the cord, is responsible for this and the other neurological symptoms.

This case has, I expect, been given more careful personal attention than any other case in the State Hospital for Nervous Diseases. The work has been done by the hospital staff. The removal of this spleen was contemplated on account of this being a case of pernicious anemia.

I have a case in the hospital at present that has been under my care for a little over a month. This was secondary to a chronic malaria. On the 23d of March the blood cells showed tertian plasmodium present. There was marked hemolysis and marked poikilocytosis, nominal microcytes and macrocytes, but no normoblasts. The differential count was 76-5-16-3; hemoglobin being 54.5; red cells, 2,510,000; whites, 5,430. There was an optic atropy; the patient could see nothing at all. I think it was due to the impoverished condition of the blood. Transfusion was done. On the 1st of April there was moderate hemolysis, and about 45 per cent poikilocytes; white cells were 6,430; reds, 3,218,000; hemoglobin, 60. On April 13 there was moderate hemolysis; 20 per cent

poikilocytes; whites, 6,780; reds, 3,572,000; hemoglobin, 55. April 28 there was only moderate hemolysis; still 20 per cent poikilocytes; 15 per cent macrocytes. 5 per cent microcytes; 60 per cent normal red cells; whites, 7,960; reds, 3,732,000; and the hemoglobin was 75; and the eyes were much improved. There was also a tendency to hemophilia in this case. He was given lime water to build up the red cells, and he was given a high gelatinous diet, and is improving. But, this was not a case of pernicious anemia. The spleen was removed in the case reported, hoping to do away with the destruction of the red cells. Whether it did it or not is a question open to discussion. The blood picture seems to show that something did it.

I am thankful to the gentlemen for their discussion of the paper. The case will be watched further.

MENTAL AND NERVOUS EFFECT OF GENERAL DISEASE.*

By W. M. McRae, M. D.,
Little Rock.

The effects of general disease on the brain and nervous system are so numerous and varied that this paper will not be an attempt to either cover the subject completely or offer any classification, but to just mention some of the most common ones seen in general practice.

From the spasm of the infant to the clouded mentality of the aged, nephritic indicates the wide range of the subject; no age being exempt and practically no disease without some effect, great or small, and of long or short duration on the brain and nervous system.

Even in general disease the value of maintaining mental quietude and combatting nervous symptoms as much as possible can hardly be overestimated, and no case, medical or surgical, could hardly be said to be a complete recovery if the patient is left in a permanently neurotic state. Many women, especially, date their trouble back to some ill-advised or poorly-done surgical operation, or a mismanaged childbirth with its resultant toxemia.

The deliriums of acute diseases are transient and pass away with the disease, apparently leaving no bad effect, excepting, of course, those instances in which the brain and cord are actually attacked by a specific organism, as in the various forms of meningitis and cerebrospinal syphilis; but prolonged toxemia causes more or less permanent nerve and mental disorders, which give rise to a class of patients belonging to no special domain of medicine. We all get to treat them and no doubt often contribute to their existence.

Nervousness is as much a symptom of disease as is pain. Pain is the lusty cry of a nerve in acute disease and is our most valuable aid to diagnosis of acute disease, as it points more or less accurately to the seat of trouble. Nervousness is a more manifest symptom sometimes than is pain, but points to no special location as the probable cause, and therefore requires a more thorough, painstaking search to make a diagnosis. We never overlook or disregard pain, but we are apt to both overlook and disregard nervousness, which is but a nerve cry, too, reduced to a whimper, so to speak, by long continued disease.

That impairment or loss of mental and nerve force will eventually take place is practically certain, and the rapidity with which it takes place, of course, depends on the original stability of the nervous system and the violence of the toxemia. Nerve matter once degenerated does not regenerate as rapidly as do other structures of the body, and would better be prevented, if possible, by an earlier recognition of the disease producing such degeneration.

It is said that the doctor buries his mistakes, but I think a multitude of them, both of omission and of commission, live, thrive and are perpetuated in the neurasthenic class especially. The greater responsibility, perhaps, for their existence, however, rests with the general practitioner, who in the majority of instances is first consulted, and if a correct diagnosis be made and the proper treatment be either instituted by himself or the patient referred to the proper specialist or surgeon, many of our *"nervous wrecks"* could be prevented.

I used to tell my neurotic patients there was nothing the matter with them, that their trouble was imaginary and would right itself in time. Now, I don't believe in so-called imaginary diseases. When we consider that of the countless hosts of people that live, how strikingly few have nothing the matter with them, and none past forty years of age, we know a statement of that kind is but a confession that we don't know what the trouble is. So, if instead of, as is often done, accepting the patient's diagnosis of "nervousness" and prescribing the "three valerians" or the "five bromides," or some such combination, or in case we are surgically ambitious, take out

*Read before the regular meeting of the Pulaski County Medical Society, August 21, 1916.

something and pass the patient along, we will make a systematic search, we can often find some exciting cause and bring about substantial relief that will be convincing to the patient.

Just as the condition of some patients is greatly magnified to them, so will the slightest improvement be closely observed and appreciated and they will be very grateful patients.

We have all seen the neurasthenic patients who have gone the rounds, had glasses fitted because they thought their eyes were failing, turbinates taken out, tonsils "amputated," a kidney attached, a piece of intestine removed; if a woman, some pelvic operation; if a man, some genito-urinary operation, and so on until finally a careful clinician has a Wassermann made, gets a positive reaction and cures the patient.

There is no intent to undervalue special surgical procedures, because they often effect the permanent cures for us, but to emphasize the danger of "slip-shod" diagnoses and failure to attach importance to mental and nervous symptoms. It would be superhuman to be able to diagnose all our cases correctly, but it is almost inhuman to overlook one by reason of carelessness.

Normally, there should be a perfectly controlled distribution of nerve energy throughout the organism. Any disturbance of this control results in symptoms varying from mild nervousness to violent explosions.

I believe a toxemia, together with consciousness of the disease and consequent mental anxiety, are the disturbing elements in neurotic cases, and that the severity of symptoms will depend on the stability of the individual's nervous system and the degree of toxemia present, as previously indicated; weak ones, of course, succumbing quicker than the more stable ones. This is manifest in even young children, one bearing quietly a temperature of 105 degrees, while a much lower temperature is sufficient to throw another into violent spasms. That this is an individual and not a family characteristic, too, is further shown by the two extremes being present in the same family. A fact that I have often observed.

In the milder neuroses, there are no structural changes in the brain or nerves, at least, not early; but, considering the susceptibility of both to influences from within and without the body, the symptoms produced can be accounted for in simply an abnormal activity resulting from prolonged toxemia and repeated shock.

No one can deny the effects, good or bad, of the mind on various processes of the body, and inversely we all know the delctorious effects of certain pathological processes on the brain and nervous system. Just as some chemical poisons seem to have a predilection for the nerve cells, so the toxines of some diseases seem to affect the brain and nervous system more than others.

It is said that a physician's success in general practice depends largely on his ability to treat his neurotic patients. Of course, his success, then, will be limited to those cases which are secondary to some systemic disease and not primary conditions due to a brain and nervous system, which was deficient in the beginning and incapable of withstanding the strain incident to even an ordinary life. These are properly referred to the neurologist or alienist, as the average general practitioner has but a passing acquaintance with them.

The diseases which, in my experience, most commonly give rise to such disorders are: For men, gonorrhea and syphilis; for women, pelvic disease of whatever origin; and for both, tuberculosis, chronic gastritis, so-called dyspepsia, chronic rheumatism or arthritis, and various intestinal putrefactions.

The type of neuroses usually seen are the late symptoms of chronic disease, and bear testimony to neglect on the part of the patient, and bad diagnosis or no diagnosis at all by the physician. However, we may have, as in syphilis, a perfect *brain storm,* with little or no previous warning, which converts a normal individual into a raving maniac in a few hours.

In neurasthenic states the patient's own story is of greatest help in getting started on the right track, and the more tact we use in securing their complete confidence and good will, the more complete will be their confession. They all like to tell their troubles, but unless they have complete confidence in you, and are convinced of an earnest desire on your part to be of benefit to them, they may reserve the very information most useful to you. Psychasthenia is rare, compared to neurasthenia, and offers even greater difficulties in diagnosis, it often being impossible to get a history from the patient. They sometimes refuse to talk, and, when they do, their ideas are so grossly exaggerated and at times ridiculous as to be of little or no value. I take it to be a more profound disturbance of the mental bal-

ance, and is found in either highly toxic conditions or a low state of mental resistance.

A good diagnostician should be a specialist in all lines in so far as making examinations is concerned, for the causes of neurotic conditions are found in all parts of the anatomy covered by specialists. If we do not examine the teeth and gums, we overlook the cause of many cases of chronic indigestion (dyspepsia) from poor mastication and toxic conditions from pyorrhea and puss pockets about the teeth. If we do not examine the nose, we overlook inflammatory and hypertrophied or atrophied conditions of turbinate bones, which, with the usually accompanying sinus involvement, cause many headaches and neuralgias. If we fail to examine the throat and tonsils, we fail to account for many low-grade toxic conditions that, if not already, will eventually cause rheumatism and joint disease of all descriptions. If we do not examine carefully the lungs, we may treat an incipient tuberculosis as a stomach trouble. Many such cases complain first and most of their failing digestion. Each internal organ should be examined carefully as to displacement, tenderness, enlargement, or any abnormality that is attracting the attention of the patient.

The female pelvis and the male genito-urinary organs offer the richest field of all for the discovery of causes of neurotic states, and a bacteriological examination of the various excretions and secretions, blood and spinal fluid will often cinch a diagnosis, or perhaps make one that would not be made otherwise.

Finally, if we are to be successful in even a fair percentage of our neurotic cases, we should examine everything if necessary, and if it takes a week, the time will be well spent.

REMOVAL OF BODY FLUIDS.

After a considerable dilution of the blood, for example by saline injection, the normal volume is ordinarily resumed with surprising promptness. Following the introduction of a quantity of diluent equal to the calculated blood volume, the excess of fluid disappears from the circulation so rapidly that, in experimental animals, the original blood volume is usually restored within half an hour and often sooner. One might naturally be inclined to assume that this prompt regulatory removal of fluid is due entirely to the excretory functions of the kidneys. This is, however, by no means the case; for a comparable regulation proceeds even after ligation or exclusion of the kidneys so that they cannot take any part in the process. Inasmuch as, even in the absence of renal function, a dilution of the blood is still efficiently counteracted, it must be assumed that the tissues play some part in the process. Indeed, it seems clear now that the tissues act up to a certain limit as a reservoir for the excess of fluid, which later leaves the body gradually; and that the activity of the kidney plays only a small role in the immediate regulation of blood volume after intravenous injection of salt solutions. — Journal of the American Medical Association.

DENTAL PREPAREDNESS.

What is the most important attribute of a soldier?

Good feet?

No.

Good eyesight?

No.

Good brains?

No.

What then?

Good teeth.

A soldier may have good feet, good eyesight, and good brains, but if he has bad teeth, he can't eat. If he can't eat he can't march near enough to the enemy to see him and use his brains to fight him.

How does a soldier get good teeth?

By having good teeth in childhood.

How do children keep good teeth?

Through being taught by their mother how to keep their teeth clean and having their teeth looked after while they are growing. This makes good teeth for future soldiers.

It would seem then as though the first patriotic duty of a mother was to keep her children's teeth in good condition.

It is.

DO YOU KNOW THAT

A little cough often ends in a large coffin?

Bodily vigor protects against colds?

Careless sneezing, coughing, spitting spread colds?

Open-air exercise cures colds?

Colds sometimes get well in spite of the excessive use of alcoholic beverages?

Overheated, air-tight rooms beget colds?

Neglected colds often forerun pneumonia?

Persistent, oft-repeated colds indicate bodily weakness?

THE JOURNAL
OF THE
Arkansas Medical Society

Owned and controlled by the Arkansas Medical Society and published under the direction of the Council.

DR. WILLIAM R. BATHURST, EDITOR

PUBLISHED MONTHLY. Price, $1.00 a Year in Advance. Single Copies, 25 Cents.

Entered as second-class matter, June 21, 1906, at the post-office at Little Rock, Arkansas, under Act of Congress of March 3, 1879.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Address:
The Journal of the Arkansas Medical Society,
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Little Rock, Ark.

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Editorials.

MERRY CHRISTMAS.

The Journal wishes to extend to every reader the compliments of the season with the hope each will enjoy a happy Christmas, a prosperous New Year, and that each may live to celebrate many more such holidays. In the words of Rip Van Winkle, "Here's to you and your family; may you live long and prosper."

OUR SECRETARY'S MESSAGE.

Dr. C. P. Meriwether, secretary of the Arkansas Medical Society, has addressed a letter to the secretaries of all county medical societies in the state, in which he says so many appropriate things for the good of the order that its contents should reach more than the secretaries. We presume that the secretaries will read the message at the next county meeting, but, unfortunately, not all the members attend—we wish they did. Especially he calls attention to needed legislation and we will not get the legislation unless the members get in touch with the representatives of their counties and the senators of their district. A recent Supreme Court decision practically puts the naming of health officers for counties into the hands of the county judges. This is unfortunate in more ways than one. It puts the matter back into politics, where nothing touching the public health should be—as witness our unfortunate State Hospital for Nervous Diseases—and the best men may not be selected either because the county judge has a political debt to pay, or because, not being of the profession, he may not know who is the best man. The coming legislature will probably pass a "Workman's Compensation" act and it is needful that the interest of the profession be properly guarded in such a measure. The State Board of Health must be given a fitting appropriation. There is the need of a State General Hospital. It may be impossible to get all these things, or even to make our representatives understand the importance of them, if we wait until the legislature assembles. Committees are powerless almost unless the ground has been prepared, and it is up to the individual efforts of each member, as well as by the efforts of the county societies, to prepare it. Get acquainted with the members in your own county, imbue them with the necessity of action, and disabuse their minds of the too common idea that when the physician asks something of the legislature he has a personal axe to grind.

Dr. Meriwether also calls attention to the fact that the annual reports of secretaries are due in January and certainly before March. By paying your dues promptly—and it is a mere trifle—you will greatly aid the secretary in getting up his report in time that the wheels of the State Society may revolve smoothly.

A PERSONAL MATTER WITH OUR MEMBERS.

Many of the members of the Arkansas Medical Society seem little concerned with the details of the management of The Journal; yet The Journal is the property of the society, and as such it belongs to every member of the society. The Journal is now confronted with a problem in the solution of which it is essential that the owners, that is, the members of the society, render what personal assistance they can. The immense increase in the cost of paper is a matter of common knowledge. Not only paper, but printer's ink and practically all other material used in getting out The Journal, have advanced in price from 50 to 100 per cent. This necessitates increasing

The Journal advertising patronage. There are two alternatives: that of reducing the number of pages, or raising the per capita assessment. We believe neither of these is wise, nor would be acceptable.

Newspapers everywhere are raising their rates to meet the increased cost of material. We cannot do this. But to increase the revenue at the present rates we can perhaps satisfy many additional advertisers that they cannot afford to stay out of The Journal's advertising columns. How can this be done?

1. By patronizing The Journal's advertisers, and, what is important, letting them know that you saw their ads in The Journal.

2. By asking your druggist or other firms from whom you buy, to handle the goods of dealers or manufacturers who advertise in The Journal.

3. When a representative of a manufacturer or dealer calls on you, ask him if his firm advertises in The Journal—and if not, why not. When you receive circulars or samples by mail, write and ask if the firm patronizes The Journal. Advise us that you have done so, in order that we may follow up the prospect.

4. If there are supplies which you use which are not advertised in The Journal, advise us so that we may solicit such advertising.

By this kind of co-operation every member of the Arkansas Medical Society can very materially assist in keeping The Journal on its present plane without decreasing its size or raising the per capita assessments.

THE BUSINESS SIDE OF A PROFESSION.

There is, to some extent, a business side to every profession, including that of medicine; because, while the true professional man is not, and should not be, a mere money grubber, the insistent fact remains that he must have money to support himself and family, if he be so incumbered. The Journal has uniformly condemned united efforts to raise professional fees or concentrated action by medical associations to the end of forcing collections or formulating blacklists of slow payers. All that sort of thing savors of retail merchandising and labor union methods and is entirely below the high standards to which those of the medical profession should aspire.

And now comes an unprecedented era of high prices, perhaps due to the war and perhaps to certain patriots who are given to "conserving" the necessities of life on the slightest provocation or no provocation whatever, save that they see a chance to secure added profits. In this connection a "Standard Fee Table" for physicians has been formulated. There should not be any standard fee table. That is strictly unionism. It may be called any other name, but that is what it amounts to in the final analysis. Certainly the physician is entitled to a living if anyone is; but the individual must be the arbiter of his own affairs. The profession of medicine is not one whose chief end and aim is to make the fortunes of its professors. The theory of unionism is that the competent workman shall be paid just the same wage as the "dub." The fact that one is a member of the union suffices to entitle him to the union scale, leaving out of question his individual expertness. All are placed on the same plane. Let us devoutly hope the medical profession will never sink to that level. It may be said that a minimum fee does not prohibit the physician from charging what his services are worth, or, as some unkind wits say of some of our surgeons, "what a patient can afford." The sick man does not call on the physician who offers his services at the cheapest rate. He wants to get well and the cost is the smallest consideration. The conscientious physician is not going to charge an exorbitant fee simply because his patient can afford to pay it, nor will he refuse his services because his patient is unable to pay the fee expected. If the cost of living increases, it is perfectly legitimate for the physician to make a charge consistent with what it costs him to support his family decently. But the individual must fix his own fees. He should not have a minimum or maximum fee fixed for him by any association whatever, nor enter into a pledge to abide by such minimum fee. The physician does a whole lot of work for which he never receives remuneration. Some of this consists of direct charity work or that indirect charity work in which the patient promises to pay, but is never able to do so. Again, he does work for the public health either through public health service or in a true spirit of philanthropy; his idea of the physician's mission being that it is less for personal emolument than for the good of his fellow-creatures. Strangely enough, too, the medical profession is the only one

which, in the realm of preventive measures, who works against his own material interests, by the reduction of the number of cases of disease, the prevention of the spread of contagious diseases, the elimination of some diseases, the fight against the germ-carrying mosquito, and efforts to secure better sanitation. These and many other works engaged in by the physician freely and without remuneration may be regarded, in a sense, as so many efforts to destroy his own business, which would work very well in China, where, we are told, the physician is paid as long as he keeps his patients well; but when they become sick his fees cease.

Editorial Clippings.

SOCIAL INSURANCE.

Just what is meant by this term or what is included in it, is not clear. While much talked about at present, few seem to comprehend what may be its meaning, or what it will supply to the community, or what its effect on either society or the medical profession will be. This status of the question is probably due to the fact that no concrete plan of insurance against illness and disability has been worked out, while at the same time the need of a systematic care of those unable to care for themselves and families is acknowledged by every one. The manner in which it may be done is still conjecture.

Whatever will finally come to be included under the name or the term "Health Insurance," it seems morally certain that a social or health insurance in some form is coming, and that soon.

It is given out that during the coming winter at least twenty state legislatures will have bills presented to them relative to health insurance. That all of these bills will be of prime importance to the medical profession is evident.

The idea has, no doubt, come largely from England and Germany, where the common laborer is cared for in a different manner than is custom here. At first thought, enforced insurance would seem to be obnoxious to Americans, and we believe it is, but as thousands of laborers in America are of foreign birth and accustomed to foreign ways, we will be compelled to treat the subject as it is presented. The whole question savors much of paternalism, and paternalism is not American.

Whether or not we like it, the reality confronts us. The welfare workers have perhaps pushed the matter forward, and it will now remain for the medical fraternity to guard its rights and equities. State legislators have the habit of expecting either gratuitous or underpaid services from the medical profession, and if left to them and attorneys for the large corporations, medical services will be paid for on about the basis of European custom.

If health insurance for laborers is instituted, will it include insurance for the laborer's family, and will it provide maternity insurance? Both of the latter phases are of more importance to society than the health insurance for the laborer.

Such health measures, properly provided for, may have bearings on other questions of vital interest to the medical profession, such as free dispensaries, charity hospitals, etc. Whatever form these bills may take, our public relations committees, legislative committees and health insurance committees must be on the alert.

The medical fraternity has always and will always look first to the welfare of humanity, but it must at the same time look to the interest of its own members. Medical service rendered in the interest of social or health insurance must be amply paid for; furthermore, the beneficiary must be in the position of knowing that he is paying for this insurance and the services it brings, thus removing any suspicion of free service and pauperism—the curse of all nations.—Illinois Medical Journal.

Abstracts.

BILATERAL CHARCOT HIPS.

S. J. Wolfermann, Fort Smith, Ark. (Journal A. M. A., November 25, 1916), reports a case of bilateral Charcot hips on account of its rarity of occurrence simultaneously on both sides and as showing a long period of latency of syphilis. The patient was a white man, aged forty-two, and married, with no special family history of disease. He had had gonorrhea twenty-five years before, and in 1891 a simple hard chancre with no secondaries. He was treated with "baths" and a proprietary blood tonic, but no other medicine. He had always been in excellent health, had served in the United States army, and since discharge had been working as an automobile mechanic. He used tobacco freely and previously had drunk to excess. He began to have rheumatic pains in the legs in the fall of 1912; these occurred intermittently for

about a year. In the winter of 1914, after exposure the pains returned again and lasted about a month, and again in the summer of 1915, and extended above the knees, which had not been affected before. He had no skin lesion, was well oriented in space, but he was compelled to walk with crutches. He was hypersensitive, but had no loss of muscular sense. The knee jerks were lost; there was a suggestion of girdle pain, together with lightning pains in the leg. There was Argyll Robertson pupil and the Roentgen ray showed completed destruction of both hip joints, but there had been no pain at the point of destruction. He has improved slightly as regards his symptoms of syphilis since taking specific treatment. The special interest in the case is in the twenty-one-year lateney of the disease before the symptoms of beginning tabes appeared.

PUBLIC HEALTH EDUCATION.

W. C. Rueker, Washington, D. C. (Journal A. M. A., November 11, 1916), says that publicity, if properly managed, is bound to do good. The chief criticism of what has been done in the past in the way of enlightening the public on the need of sanitation is that it has been too spasmodic and temporary. Too much dependenee has been placed on the spoken word; while there has been an enormous amount of speech making and agitation, especially in times of great public danger, the results have too often been only temporary. What the American people want is more demonstration and less talk. Demonstration takes many forms, two of which are here especially noticed, namely, stereopticon slides and motion picture films. These two methods are very good, particularly in the education of children, but the effects lack permanency to a certain degree. The stereopticon lecture must be accurate and also entertaining; the lecture should be effective enough to do without the assistance of the slides and the slides should be good enough to tell their own story. The stereopticon form of demonstration is relatively cheap, and that there is a demand for it is shown by the results achieved by the stereopticon loan library of the Public Health Service. The demands on it are enormous and it has been the means in the past year of reaching several million people, and there is no doubt that it has aided in spreading the gospel of sanitation. Moving pieture films have not on the whole brought as good results as were expected. People do not go to the movies to be educated, as a rule; they go for amusement instead, and the moving picture operators cater to this demand. The sanitary seenario must be sugar coated and live up to the traditions of the moving picture stage, and Rueker does not have any great expectations in its future sanitary instructions. It is surprising, he says, how much good can be obtained through well-prepared charts, and well-made models are most excellent but they are expensive and the uninterested public will not come to see them in great numbers. Those which contain a puzzle which will make people stand in front and wonder how they operate are very efficient. Printer's ink is the great medium of public health education. Newspaper articles should be written with an absolute absence of medieal terms. They must be convineing and still tell the story. Special articles in magazines are of great value and speeial bulletins are another valuable method, provided they can be made to reach the people. The demonstration, however, which is of the greatest value is that which shows to the public just what can be aceomplished by sanitation. The health officer who attacks a eertain situation and eonquers it produees an effect which is lasting, sueh as the people of New Orleans, for example, have had in the conquest of yellow fever and those of San Francisco in the handling of bubonie plague. The great sanitary hope of the future, Rucker says, is the edueation of the ehild today.

Personals and News Items.

Dr. Sam J. Allbright has moved from Center Hill to Kensett.

Dr. Sam D. Kirkland has moved from Van Buren to Haekett City, Mo.

Dr. and Mrs. M. L. Norwood of Lockesburg visited in Little Rock last month.

Dr. Sam E. Thompson has severed his connection with the State Tuberculosis Sanatorium, Carlsbad, Texas, and opened offices in San Angelos, Texas.

Physicians visiting in Little Rock during the past month include F. T. Murphy, Brinkley; R. C. Dorr, Batesville; J. T. Clegg, Siloam Springs; Thos. S. Douglass, Ozark; J. B. Sheriff, DeLuce; W. B. Lawrence, Batesville.

The first scientific session of the Amerieaan Congress on Internal Medicine will take place

in New York City, on December 28-29, 1916. The symposium on Duodenal Ulcer will bring out many new points anent the still mooted question of the etiology of this pathological condition.

Dr. Cowley S. Pettus of Little Rock has been appointed superintendent of the Pulaski County Hospital. Dr. Pettus has recently visited a number of the large hospitals and hopes the inspection and experience gained will enable him to continue the high standard of efficiency at the County Hospital.

Dr. J. L. Greene, formerly superintendent of the State Hospital for Nervous Diseases in Little Rock, and Dr. M. F. Lautman, formerly medical director of the Levi Memorial Hospital, Hot Springs, announce their association for the practice of medicine with offices in the Dugan-Stuart Building, Hot Springs, Ark.

Reprints.—The Journal has nothing to do with the matter of reprints, except to receive the order and transmit it to the printer. No money passes through our hands in connection with reprints. Our printers have endeavored to fix a price that will just about pay for the cost of production. Your order must be given early.

Missionary Hospital Work in India.—Qualified medical man required who is in sympathy with religious work. Passage and small monthly allowance made. Three years agreement. Apply, sending copies of testimonials: Commissioner Thomas Estill, Salvation Army Headquarters, 108 N. Dearborn Street, Chicago, Ill.

The National Board of Medical Examiners held its first examination in October, at Washington, D. C. There were thirty-two applicants from seventeen states, representing twenty-four medical schools, and of these, sixteen were accepted, ten of whom took the examination; five passed. The second examination will be held in Washington, D. C., June, 1917. For further information address: Dr. J. S. Rodman, Secretary, 2106 Walnut Street, Philadelphia.

Starch and Table Salt Sold as Neosalvarsan.—The recent indictment by the Federal Grand Jury in Newark, N. J., of "Dr." Jean F. Strandgaard, of Toronto, Canada, and George F. Hardaere, of Toronto, and a steward on the steamship "United States," has revealed to Chief Inspector E. R. Norwood, of the Customs Service in New York, what he believes to be a widespread conspiracy to defraud the government out of customs revenue by smuggling salvarsan and neosalvarsan into the United States.

A most serious feature of this matter is the discovery by Inspector Norwood that these men also had in their possession a large quantity of spurious neosalvarsan. Upon analysis by the government experts, the contents proved to be starch in the majority of the ampules and stained table salt in the others.

NEW HOSPITAL AT FORT SMITH.

It will be remembered that Dr. Ludeau's Fort Smith Hospital burned down about two years ago. It has been rebuilt and everything in it is new and up to date. But Dr. Ludeau decided to sell it and he found purchasers in Drs. Charles S. Holt and A. J. Morrisey, who will personally conduct it hereafter. Both gentlemen are able physicians of excellent reputation, both as practitioners and good citizens, and The Journal bespeaks them recognition and extends the best wishes for their success. It will be known as the St. John's Hospital.

NEW HEAD FOR FRANK S. BETZ COMPANY—MR. LOUIS R. CURTIS, FORMERLY OF ST. LUKE'S HOSPITAL, CHICAGO, ELECTED PRESIDENT OF WELL-KNOWN SURGICAL INSTRUMENT HOUSE.

Considerable interest has been aroused in medical circles by the announcement of the election of Mr. Louis R. Curtis, for eighteen years superintendent and secretary of St. Luke's Hospital, Chicago, as president of that institution.

Mr. Curtis was born in 1865 in Philadelphia. He obtained his college training at Stevens, graduating as mechanical engineer. In 1889 he entered the hospital field as assistant superintendent of the New York Hospital. During that period he attended medical college, not with an idea of practicing, but to better fit himself for his hospital work. From the New York Hospital Mr. Curtis went to the General Hospital of Elizabeth, New Jersey, staying there for about one and one-half years. From there he came to St. Luke's Hospital, Chicago, as superintendent, and has been the dominating figure in that institution, both as superintendent and secretary, until recently, and is now vice president in charge

of the operation of the institution. During the last years Mr. Curtis has also been prominent as a consulting engineer, especially among hospitals, and has introduced many advanced and successful ideas in hospital construction and organization. His wide experience among hospitals and medical men, coupled with his technical training, makes him peculiarly well fitted for his new position.

Mr. Frank S. Betz, under whose control the concern bearing his name assumed its present proportions, will continue with the company as chairman of the Board of Directors and give the organization the benefits of his long experience and training. His many and diversified interests are given as reasons for his retiring as active head of the company.

New and Nonofficial Remedies.

Swan's Bacillus Bulgaricus.—A pure culture in tubes of the *bacillus bulgaricus*. It is designed for internal administration and for direct application to body cavities, abscesses and wounds. The culture is supplied in boxes of twelve tubes. The tubes must be kept in a cool place and must not be used after the date stamped on the package. Swan-Myers Company, Indianapolis, Ind. (Journal A. M. A., November 25, 1916, p. 1601).

Propaganda for Reform.

Patent Medicine Prosecutions Under the Food and Drugs Act.—The following information was brought out in connection with prosecutions by the federal authorities chiefly under that portion of the Food and Drugs Act which provides penalties against misleading, false and unwarranted therapeutic claims. Dr. Porter's Antiseptic Healing Oil was found to be essentially a solution of camphor and carbolic acid in cotton seed oil. It was claimed to be an excellent remedy for cuts, sores, old chronic ulcers, corns, bunions and a preventive of whooping cough, diphtheria and tuberculosis. Ballard's Horehound Syrup Compound was sold "for consumption, coughs and colds" and other diseases. Dr. Shoop's Night Cure was claimed promptly to cure ulceration, inflammation or congestion of the womb, leucorrhea, painful ovaries and other female diseases. It was found to be a suppository containing zinc carbonate, zinc sulphate and boric acid in a cacao butter. Dr. Shoop's Cough Remedy was found to be a syrup containing ammonium benzoate and probably white pine tar and gum. Dr. Shoop's Restorative was sold for the cure of all diseases of the stomach, liver and blood and still other diseases. Father John's medicine was advertised as a consumption "cure." Dr. Shoop's Twenty-Minute Croup Remedy was found to be a syrup containing glycerin and a small amount of salicylic acid. Bad-Em Salz was found to consist of sodium chlorid, sodium sulphate, sodium bicarbonate, and a small amount of tartaric acid. It was sold with claims suggesting that it was derived from European springs and that it dissolved gall stones and gravel in the kidneys or bladder. Kennedy's Cal-Cura Solvent was a water-alcohol liquid containing 2.44 per cent potassium acetate, 16.75 per cent alcohol, 52.46 per cent cane sugar and vegetable matter resembling mint, cardamon and boneset. From the claims which were made, one would get the impression that there could be few ills that it would not cure (Journal A. M. A., November 4, 1916, pp. 1385-6).

Intravenous Therapy.—The technic, although not difficult, must be thoroughly mastered, or undue pain, infection, air embolism, or even death may result. Often a drug has an action different from that obtained by the usual method of administration. Deaths have resulted not only from a lack of proper technic, but also from a lack of knowledge of drugs so administered. Thus death has followed the injection of an iron preparation containing peptone, and also following intravenous injection of ether. Intravenous injections, while sometimes superior to the slower methods, are distinctly inferior when a continuous rather than a sudden action is desired as with iodids, nitrites, iron, or salicylates. Intravenous injections should not be resorted to unless distinct advantages are to be secured, as when immediate action is necessary in emergencies, where the drug is not otherwise absorbed or is destroyed in the stomach. In the light of our insufficient knowledge of the action of simple drugs when administered intravenously, the injection of complex mixtures of drugs is particularly reprehensible (Journal A. M. A., November 11, 1916, p. 1450).

Sleepy Water.—Chicago physicians are told by the Sleepy Water Corporation that Sleepy Water is a "cure" for diabetes, Bright's disease and many other ills. The claim is also made that for six years not a single case of nephritis or diabetes treated

with this water has failed to be cured. Sleepy Water sells for a dollar a gallon, but you cannot buy less than fifty gallons. At least a gallon a day must be taken and even five gallons a day may be taken "without any detrimental effect upon the heart action, no matter how bad the heart action seems to be." If we are to take the corporation's word for it, "Sleepy Water" has performed many miracles, although details of its modus operandi are not forthcoming, "as no autopsy has been performed on a person cured by Sleepy Water" (Journal A. M. A., November 18, 1916, p. 1530).

HUMAN EASE.—The federal authorities have issued a fraud order, denying the use of the mails to the Human Ease Medicine Company of Atlanta, Ga. Human Ease was guaranteed "to cure all diseases both in and on man and beast." Analysis showed it to be an ointment composed of lard with a little sodium bicarbonate, sodium sulphate and potassium nitrate, flavored with oil of sassafras (Journal A. M. A., November 18, 1916, p. 1540).

SOME MISBRANDED NOSTRUMS.—The following "patent medicines" were found misbranded by the federal authorities: A. D. S. Cod Liver Oil Comp., claimed by the American Druggists' Syndicate to be a sovereign remedy in pulmonary tuberculosis, was not possessed of the virtues claimed, nor a preparation of the active principles of pure Norwegian cod liver oil. Johnson's Chill and Fever Tonic, claimed to be a "guaranteed remedy" for dengue fever, typhoid fever, measles and la grippe, was a watery solution of Epsom salts and cinchonin hydrochlorid. A. D. S. Peroxid Talcum Antiseptic and Deodorant, sold by the American Druggists' Syndicate with the claim that it contained a peroxid and to be a wonderful antiseptic and germicide, was found to have no antiseptic properties and no detectable peroxid. Dr. King's Royal Germeteur, claimed to be a "germ destroyer," was found to consist essentially of 98 per cent water and 2 per cent sulphuric acid, saturated with hydrogen sulphid (Journal A. M. A., November 18, 1916, p. 1541).

WHAT AILED HIM?—A druggist wants to know what ailed the patient for whom the following was prescribed: Calomel 1 grain, potassium iodid 4 drachms, potassium bromid 3 drachms, potassium citrate 5 drachms, tincture of aconite 2 fluid drachms, wine of ipecac 1 fluid ounce, chloroform water to make 3 fluid ounces. Without venturing a guess regarding the patient's illness, it is suggested that if anything was wrong with the patient after he took the medicine, the case may be diagnosed as one of misplaced confidence, either the physician's misplaced confidence in drugs or the patient's misplaced confidence in the physician (Journal A. M. A., November 18, 1916, p. 1541).

TARTRATES IN NEPHRITIS.—While the vegetable acids, such as nitrates, burn to alkali in the body, the tartrates are not so converted, and leave the body nearly in their original form. Underhill and others have shown that tartrates in large doses can cause tubular nephritis in animals. While human beings tolerate without apparent kidney disturbance small doses of tartrates, either given medicinally or as they occur in baking powders and in certain foods, and while it would probably require very large doses to cause kidney inflammation, it would seem inadvisable to give food rich in tartrates or to give medicinally large doses of tartrates in nephritis (Journal A. M. A., November 25, 1916, p. 1601).

MORE MISBRANDED NOSTRUMS.—The following "patent medicines" have been found misbranded under the U. S. Food and Drugs Act, chiefly because of unwarranted and false therapeutic claims: Dr. Jones' Liniment was recommended for corns, toothache, backache, "rheumatism," and various other conditions. Analysis showed it to be "essentially a gasolene solution of oleoresin of capsicum, oil of sassafras, methyl salicylate, and evidently, volatile oil of mustard." Graham's Dyspepsia and Heartburn Remedy was found to contain, among other things, sodium bromid, sodium bicarbonate, magnesium carbonate, sugar, chloroform, alcohol, and small quantities of morphin. It was asserted to be a remedy for gastritis, ulceration or threatened cancer of the stomach, and all disorders arising from an impaired digestive system. Mother Hart's Baby Syrup admittedly contained opium and alcohol. It was asserted to be "a safe remedy for the home." Dr. Hale's Household Ointment was sold as "a positive specific for the speedy and permanent cure of rheumatism, lame back, neuralgia," and many other conditions. Analysis showed the ointment to be composed of "vaseline and camphor with a small amount of aromatics resembling oil of thyme." Dr. Greene's Nervura was sold for nervousness, nervous debility, weakness, poor

blood, etc. It was found to contain 18 per cent of alcohol, and celery, ginger and other unidentified vegetable material were indicated. Hill's Freckle Lotion was claimed to be absolutely harmless when used externally according to directions. Yet it was found to contain corrosive sublimate. Dr. Hiatt's Germicide was sold as a specific for croup and for diphtheria, quinsy, sore throat, etc. It was a syrup containing sodium benzoate, phenol, alcohol, a small amount of glycerin, probably balsam of tolu, and flavored with oil of wintergreen (Journal A. M. A., November 25, 1916, pp. 1615 to 1616).

Unna's Paste for Varicose Veins.—In the treatment of varicose ulcers of a mild form, Dr. Ochsner prepared a boot composed of several layers of a bandage, each treated with Unna's paste applied hot. The paste consists of gelatine 4 parts dissolved in 10 parts hot water to which 10 parts glycerin and 4 parts zinc oxid are added (Journal A. M. A., November 25, 1916, p. 1617).

Toilet Lotion.—Nothing is better to soften and whiten the skin than the official cold cream. For oily skins a tragacanth lotion is suitable (Journal A. M. A., November 25, 1916, p. 1618).

Obituary.

A man has died. Just when the meridian of life was reached, when his charaeter had fully developed to its most effective value, when the reward of earthly life, by the grateful hand of lavished kindness holds out its jewels so plenteous, as evidenee of his goodness, noble deeds and kindly acts, that he might while yet alive enjoy the harvest he had so wonderfully and unselfishly sown, the mysterious hand of Fate snatched them away, and waving the wand of eternal sleep, like one merely hypnotised, he fell asleep. When we prospectively view the sad incident we should not think unkindly of Fate. His reward is now unlimited. Knowing about his life, his true sincerity and ever untiring deeds of kindness, we know the rebound of goodness would have added mueh to his life had he continued to live, but we must know he fares much better now—it's transformation into eternal life in which he enjoys the labors of his earthly life.

I know nothing of the earlier life of my departed friend, Dr. H. J. F. Garrett. I know but little—only what he modestly told me—about his early struggles when budding into manhood and developing in the work of his chosen profession, which profession he much honored. But this I know about him: to meet him as I did some eight or ten years ago, he impressed you as a man of honor, a man of courage, a man of real ability, a man whose soul was responsive to every noble impulse, to every grief and sorrow that was the misfortune of his fellow-man, and to every thought of greatness in words expressed. He was a devoted humanitarian; he loved right; his ever readiness to endorse a noble deed, with his other mentioned virtues, was so impressive to me I could not resist the temptation to sound his heart. This gave me the real knowledge of the man and was largely responsible for my discovery of his responsive nature.

Speak of your great men that you know and have known, read of the men renowned in history, inquire wherever you may of noble men, of great men, you will never find a nobler, greater, better man than he of whom I write.

Much more could I say of Dr. Garrett, but nothing stronger than I have said.

I wish to acknowledge my devoted friendship and my strongest attachment for this man who was a living example of what God intended man to truly be. As I write of him I drop a tear in grief and express my deepest sympathy for his loved ones.

As a comfort thought for them, I deeply express this feeling of sentiment; I am sincerely satisfied with his life on earth, and grateful that I knew him well, and that he was my friend. I find the sweetest satisfaction with his life on earth and know he now enjoys his just reward.

Cowley S. Pettus.

County Societies.

FRANKLIN COUNTY.

(Reported by Thos. Douglass, Sec'y.)

The Franklin County Medical Society held its regular annual reorganization meeting December 5, at Ozark. The president, Dr. Post, presided. Members present: Drs. Porter, Warren, Blackburn, T. B. Blakely, King, Harrod, Higgins, Vaught, Akin, and Douglass. Dr. W. C. Porter, of Coal Hill, was elected president; Dr. G. D. Warren, of Ozark, vice

president; Dr. Thos. Douglass, secretary-treasurer; Dr. J. C. Harrod, of Denning, delegate, and Dr. W. J. King, of Branch, alternate.

We had a good program in spite of the fact that a majority of those expected to read papers were not present. Dr. Blakely read a paper on "Turpentine." Dr. Blakely is our re-discoverer of old remedies and always throws new light on old subjects. There were some interesting case reports.

A banquet was served at 1:30 at the Haberer Hotel, which was much enjoyed. We had some good after-dinner speeches. Dr. Post proved to be a graceful toastmaster and excellent speeches were made by Drs. Harrod, Blakely, King and Higgins.

After dinner the subject of "Medical Economics" came in for full treatment. This is one subject on which our society can get enthusiastic. We were disappointed in that a number of visitors were unable to attend.

BOONE COUNTY.

(Reported by F. B. Kirby, Sec'y.)

The Boone County Medical Society met in Harrison, Ark., December 5, 1916, with the following members present: Drs. W. A. Butt, president; N. L. Barker, J. J. Johnson, D. E. Evans, Swartz Baines, H. L. Routh, W. H. Poyner, and L. Kirby. Visitor, Dr. J. C. Blackwood.

Dr. L. Kirby read a paper on "Medical Ethics." Dr. Swartz Baines read a paper on "Technic of Normal Labor." The discussion elicited was thorough and able. Dr. J. C. Blackwood was elected to membership. The annual election resulted in the selection of Dr. N. L. Barker, Harrison, president, and Dr. F. B. Kirby, Harrison, secretary.

PRAIRIE COUNTY.

(Reported by J. R. Lynn, Secretary.)

Hazen, November 24, 1916.—The Prairie County Medical Society met in DeVall's Bluff on October 26 with the following members present: Drs. W. W. and F. A. Hipolite, James Parker, J. C. Gilliam, C. A. Ellis, and J. R. Lynn. The following officers were elected: President, Dr. C. A. Ellis, Hazen; vice president, Dr. J. C. Gilliam, Des Are; secretary, Dr. J. R. Lynn, Hazen; treasurer, Dr. W. W. Hipolite, DeVall's Bluff; delegate to State Society, Dr. J. R. Lynn, Hazen; alternate, J. C. Gilliam, Des Arc.

DALLAS COUNTY.

(Reported by C. J. March, Sec'y.)

The Dallas County Medical Society met in regular session at Fordyce and elected the following officers for the ensuing year: President, Dr. H. H. Atkinson, Fordyce; vice president, Dr. J. Y. Smith, Sparkman; secretary-treasurer, Dr. C. J. March, Fordyce. Two new members were accepted at this meeting.

At the next meeting, the second Tuesday in January, Dr. H. H. Atkinson will read a paper on "The Composition, Preparation and Proper Methods of Using Dakin's Solution." There will be at least one other paper on some subject of general interest.

ASHLEY COUNTY.

(Reported by J. C. Simpson, Sec'y.)

The Ashley County Medical Society met at Hamburg December 7, 1916. Meeting called to order by president, Dr. W. H. Shipman, of Montrose. General discussion of the mosquito and means of eradication followed, after which the question, "What to do with a case of chickenpox, or other contagious diseases at large in the community," was discussed. The secretary read a letter from Secretary Meriwether of the State Society. A resolution endorsing a "State Charity Hospital" was passed and the secretary instructed to send a copy to Representative Honeycutt and have the resolution published in the county newspapers.

Dr. Hancock was elected a member of the society. The following officers were elected for the ensuing year: President, A. E. Cone, Portland; vice president, F. M. Sherrer, Portland; secretary-treasurer, J. C. Simpson, Hamburg; delegate to State Society, J. C. Simpson, Hamburg; alternate, W. H. Shipman, Montrose.

It was moved and adopted that a resolution of sympathy be tendered Dr. W. S. Norman concerning the recent loss of his daughter.

Reports and discussions followed of several interesting cases.

It was decided that each member of the society be made a committee of one to report to the secretary any evidence against any persons prescribing or dispensing medicine illegally. All evidence to be turned over to the prosecuting attorney by the secretary before the next meeting of the Grand Jury.

LITTLE RIVER COUNTY.

The Little River County Medical Society met at Foreman, December 5. Members present: Drs. Phillips, York and Ringgold, of Ashdown; Stevens and Shackelford, of Foreman; Vaughan, of Richmond, and Peavy, of Winthrop. Dr. J. B. Chase, of Winthrop, was a visitor.

Not having held any meetings for several months, there was no regular program to fill; so, to have an interesting meeting, quite a number of cases were reported and discussed freely by all present. A renewed interest in the society was promised for 1917.

The following officers were elected: President, D. L. Stevens, Foreman; vice president, J. W. Ringgold, Ashdown; secretary-treasurer, W. E. Vaughan, Richmond; delegate to the State Medical Society, T. T. Shackelford, Foreman.

Our regular monthly meetings are held on the first Tuesdays, meeting at different places in the county. We extend a cordial invitation to our neighboring physicians and surgeons and elsewhere to meet with us. Help us along. Come, let's get together, be more sociable, learn more of each other, and by so mixing and mingling with one another we can be of mutual benefit to all.

To our near-by brother physicians, we especially invite you to meet with us, and to those farther away, you are also invited to meet with us when you can.

Wishing one and all a happy and prosperous New Year, I am,

Fraternally,

W. E. VAUGHAN, *Sec'y.*

LAWRENCE COUNTY.

(Reported by H. R. McCarroll, Sec'y.)

The Lawrence County Medical Society met in regular session with Dr. J. H. Stidham, at Hoxie, December 6.

The subject for the meeting was a symposium on "La Grippe," and the following papers were read and discussed: "Etiology," Dr. J. M. Stephens; "Complications and Sequella," Dr. J. C. Land; "Treatment," Dr. G. A. Warren. Dr. Land was late getting to the meeting and his paper was read by Dr. Swindle. Dr. Warren did not have his paper ready, but made an excellent talk on his part. The papers were discussed by Drs. McCarroll, Swindle, McAdams, Land and Robinson. The essayists then closed the discussion of their papers.

The election of officers then ensued. Dr. J. C. Swindle, president; Dr. J. M. Stephens, vice president; Dr. H. R. McCarroll, secretary; Dr. F. D. Smith, censor; Dr. G. A. Warren, delegate; Dr. J. H. Stidham, alternate.

Members present: J. C. Land, H. R. McCarroll, W. J. Robinson; F. D. Smith, J. C. Swindle, J. M. Stephens, J. H. Stidham, C. C. Townsend, G. A. Warren.

Dr. McAdams of Jonesboro and Dr. Sherrell of Walnut Ridge were visitors and guests of the society.

After the meeting all retired to the beautiful dining room of the Boas Hotel, where Dr. Stidham had arranged for a most excellent banquet. A most enjoyable time was had by all present. Dr. McAdams, as a visitor and guest, made a nice talk and recited some poetry which was very fitting to the occasion. Other talks were made by Drs. Warren and Swindle and others, Dr. Smith, the president, acting as toastmaster.

Book Reviews.

VENESECTION.—A brief summary of the practical value of venesection in disease. For students and practitioners of medicine. By Walton Forrest Dutton, M. D. Illustrated with several text engravings and three full-page plates, one in colors. Published by F. A. Davis Company, Philadelphia, Pa., 1916. Price, $2.50 net.

This book describes, in detail, the proeedure of veneseetion and its application. The author does not claim the book to be a treatise on disease. He gives in a concise way the therapeutic value of an agent which has been used successfully by many eminent physicians.

THE PRACTICAL MEDICAL SERIES.—Comprising ten volumes of the year's progress in medicine and surgery. Under the general editorial charge of Charles L. Mix, A. M., M. D., Professor of Physical Diagnosis in the Northwestern University Medical School.

VOLUME IV—GYNECOLOGY.—Edited by E. C. Dudley, A. M., M. D., and H. M. Stowe. Price of this volume is $1.35.

VOLUME V—PEDIATRICS.—Edited by Isaac A. Abt, M. D., with a collaboration of A. Levinson, M. D. Including ORTHOPEDIC SURGERY, edited by John Ridler, A. M., M. D., with a collaboration of Charles A. Parker, M. D. Price of this volume is $1.35. Price of the series of ten volumes, $10.00.

These books are published primarily for the general practitioner; at the same time the arrangement in several volumes enables those interested in special subjects to buy only the parts they desire.

OFFICERS AND COMMITTEES

OF THE

ARKANSAS MEDICAL SOCIETY

Next Annual Session, Little Rock, May, 1917.

President—M. L. Norwood Lockesburg
First Vice President—L. L. Purifoy El Dorado
Second Vice President—J. M. Lemons Pine Bluff
Third Vice President—W. R. Brooksher Fort Smith
Secretary—C. P. Meriwether Little Rock
Treasurer—Wm. R. Bathurst Little Rock

COUNCILORS AND COUNCILOR DISTRICTS

FIRST COUNCILOR DISTRICT

Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph Counties. Councilor, F. L. Nelson, Corning. Term of office expires 1917.

SECOND COUNCILOR DISTRICT

Cleburne, Fulton, Independence, Izard, Jackson, Sharp and White Counties. Councilor, J. C. Cleveland, Bald Knob. Term of office expires 1918.

THIRD COUNCILOR DISTRICT

Arkansas, Cross, Lee, Lonoke, Monroe, Phillips, Prairie, St. Francis and Woodruff Counties. Councilor, H. H. Rightor, Helena. Term of office expires 1917.

FOURTH COUNCILOR DISTRICT

Ashley, Bradley, Chicot, Cleveland, Desha, Drew, Jefferson and Lincoln Counties. Councilor, Wm. Breathwit, Pine Bluff. Term of office expires 1918.

FIFTH COUNCILOR DISTRICT

Calhoun, Columbia, Dallas, Lafayette, Ouachita and Union Counties. Councilor, H. H. Henry, Eagle Mills. Term of office expires 1917.

SIXTH COUNCILOR DISTRICT

Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier Counties. Councilor, J. H. Weaver, Hope. Term of office expires 1918.

SEVENTH COUNCILOR DISTRICT

Clark, Garland, Hot Spring, Montgomery, Saline, Scott and Grant Counties. Councilor, J. B. Crawford, Benton. Term of office expires 1917.

EIGHTH COUNCILOR DISTRICT

Conway, Johnson, Faulkner, Perry, Pulaski, Yell and Pope Counties. Councilor, Earle H. Hunt, Clarksville. Term of office expires 1918.

NINTH COUNCILOR DISTRICT

Baxter, Boone, Carroll, Marion, Newton, Searcy, Stone and Van Buren Counties. Councilor, Leonidas Kirby, Harrison. Term of office expires 1917.

TENTH COUNCILOR DISTRICT

Benton, Crawford, Franklin, Logan, Sebastian, Madison and Washington Counties. Councilor, J. T. Clegg, chairman, Siloam Springs. Term of office expires 1918.

Delegate to American Medical Association—C. P. Meriwether, Little Rock; R. C. Dorr, Batesville.

COMMITTEES

SCIENTIFIC PROGRAM

R. C. Dorr, Batesville, chairman; Wm. R. Bathurst, Little Rock; C. P. Meriwether, Little Rock (ex-officio).

MEDICAL LEGISLATION

C. A. Archer, DeQueen, chairman; F. T. Murphy, Brinkley; Wm. T. Parks, Hot Springs.

BOARD OF VISITORS TO THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF ARKANSAS

G. A. Warren, Black Rock, chairman; W. H. Deaderick, Hot Springs; O. L. Williamson, Marianna.

NECROLOGY

Don Smith, Hope, chairman; Wm. Gibson, Nashville; T. T. Shackleford, Foreman.

HEALTH AND PUBLIC INSTRUCTION

C. R. Shinault, Little Rock, chairman; H. H. Rightor, Helena; M. Fink, Helena.

SANITATION AND PUBLIC HYGIENE

C. W. Garrison, Little Rock, chairman; S. A. Southall, Lonoke; J. S. Wood, Hot Springs.

CANCER RESEARCH

W. A. Snodgrass, Little Rock, chairman; C. J. March, Fordyce; H. H. Kirby, Little Rock.

FIRST AID

J. P. Runyan, Little Rock, chairman; J. E. Sparks, Crossett; A. S. Buchanan, Prescott.

INFANT WELFARE

F. C. Mahoney, El Dorado, chairman; H. H. Niehuss, El Dorado; Morgan Smith, Little Rock; P. H. Phillips, Ashdown; C. E. Kitchens, DeQueen.

HISTORY OF THE ARKANSAS MEDICAL SOCIETY

L. P. Gibson, Little Rock, chairman; C. P. Meriwether, Little Rock; Wm. R. Bathurst, Little Rock.

MEMORIAL TABLET IN MEMORY OF THE LATE DR. JOHN S. SHIBLEY

L. P. Gibson, Little Rock, chairman; J. G. Eberle, Fort Smith; A. R. Hardin, Fort Smith; F. Vinsonhaler, Little Rock; M. D. Ogden, Little Rock.

MEDICAL EXPERT TESTIMONY

L. P. Gibson, Little Rock, chairman; M. D. Ogden, Little Rock; St. Cloud Cooper, Fort Smith; C. H. Cargile, Bentonville; L. J. Kosminsky, Texarkana.

MEMBERS OF COMPONENT SOCIETIES

(Notify Dr. C. P. Meriwether, Secretary, Little Rock, if errors in Names and Addresses are discovered.)

Arkansas County.

Bunn, A. D.....Humphrey
Fowler, Arthur Humphrey
Hill, B. L.....Stuttgart
John, M. C.....Stuttgart
Moorhead, W. H.....Stuttgart
Morphew, L. H.....Stuttgart
Sillin, C. W.....Stuttgart
Swindler, E. B.....Stuttgart
Park, C. E.....DeWitt
Winkler, E. H.....DeWitt
Lowe, A. M.....Gillett
Lowe, W. W.....Gillett
Derrick, H. C.....DeLuce
Hayward, C. E.....Wagoner, Okla.
Whitehead, R. H.....Tichnor
Dickens, Homer.....St. Charles

Ashley County.

Cone, A. E.....Portland
Cockersham, H. E.....Portland
Sherrer, Fred M.....Portland
Sparks, J. E.....Crossett
Setzler, G. H.....Crossett
Vines, C. L.....Crossett
Hawkins, M. C.....Parkdale
Williams, R. G.....Parkdale
Barnes, L. C.....Hamburg
George, B. F.....Hamburg
Norman, W. S.....Hamburg
Simpson, J. W.....Hamburg
Simpson, J. C.....Hamburg
Erwin, E. D.....Winchester
McGehee, E. C.....Boydelle
Wilks, E. H.....Little Rock
Shipman, W. H.....Montrose

Baxter County.

Morrow, J. J.....Cotter
Pinkerton, H. E...Jefferson City, Mo.
Hipp, J. A.....Buford
Tipton, W. C.....Mountain Home
Tipton, J. T.....Mountain Home

Benton County.

Buffington, G. H.....Decatur
Eubanks, F. G.....Decatur
Cargile, Chas. H.....Bentonville
Henry, J. T.....Bentonville
Hurley, C. E.....Bentonville
Hurley, Thos. W.....Bentonville
Huffman, K. B.....Bentonville
Lindsey, J. H.....Bentonville
Moody, W. C.....Bentonville
Pickens, W. A.....Bentonville
Beard, J. H.....Siloam Springs
Clegg, J. T.....Siloam Springs
Duckworth, F. M.....Siloam Springs
Sexton, J. Z.....Siloam Springs
Smiley, J. L.....Siloam Springs
McHenry, W. A.....Rogers
McKelvey, A. A.....Rogers
Moore, W. A.....Rogers
Pickens, E. E.....Rogers
Rice, R. S.....Rogers
Rice, C. A.....Rogers
Zugg, C. L.....Rogers
Fergus, J. A.....Elm Springs
Hodges, T. E.....Lincoln
Ramsey, T. C.....Gentry
Wilson, C. S.....Gentry
Hughes, G. A.....Gravette
Clemmer, J. L.....Springtown
Highfill, E. J.....Cave Springs
Rice, T. M.....Avoca
Hodges, Guy.....Garfield
Green, L. O.....Pea Ridge
Harrison, A. J.....Lowell
Horton, C. W.....Hiwassa
Mackoy, Frank W....Milwaukee, Wis.
Powell, J. T.....Maysville

Boone County.

Barker, M. L.....Harrison
Evans, D. E.....Harrison
Fowler, J. H.....Harrison
Hathcock, A. M.....Harrison
Johnson, J. J.....Harrison
Kirby, F. B.....Harrison
Kirby, L.....Harrison
Poyner, Wm. H.....Harrison
Routh, Chas. M.....Harrison
Sims, J. L.....Harrison
Baines, Swartz Bergman
Albright, Sam.....Kensett
Bolinger, John.....Lead Hill
Butt, W. A.....Omaha
McCurry, D. K.....Alpena Pass
Routh, H. L.....Batavia

Bradley County.

Barnett, S. H.....Warren
Ellis, W. S.....Warren
Fike, W. T.....Warren
Ganaway, C. E.....Warren
Green, B. H.....Warren
Hartsell, W. L.....Warren
Martin, C. N.....Warren
Martin, R.....Warren
Wilson, Geo. Hermitage
Wommack, W. E.....Hermitage
Jackson, D. A.....Vick
Crow, M. T.....Ingall's
Brazell, R. D.....Moro Bay

Calhoun County.

Rhine, T. E.....Thornton
Wilson, D. F.....Hampton
Jones, E. T.....Hampton

Carroll County.

Bolton, Fred J.....Eureka Springs
Floyd, R. G.....Eureka Springs
Huntington, R. H.....Eureka Springs
John, J. F.....Eureka Springs
Phillips, J. E.....Eureka Springs
Pace, Henry Eureka Springs
George, Chas. A.....Berryville
Poyner, I. M.....Berryville
Harvey, W. A.....Berryville
Donaldson, C. W.....Green Forest
Morrow, F. R.....Green Forest
Poynor, E. E.....Green Forest
Price, C. T.....Honey Grove, Tex.
Poynor, J. W.....Osage
Reynolds, J. R.....Grand View
Sisco, C. P.....Osage

Chicot County.

Anderson, A. G.....Eudora
Douglass, S. W.....Eudora
Parr, H. H.....Eudora
Curtis, J. F.....Lake Village
Henry, R. N.....Lake Village
McGehee E. P.....Lake Village
Norton, M. M.....Lake Village
Barlow, E. E.....Dermott
Baker, E. Dermott
Banks, O. M.....Dermott
Ringgold, G. W.....Dermott
Easterling, W. W.....Chicot
Clark, P. C.....Sunny Side
Ridgon, F. E.....Reedland

Clay County.

Latimer, N. J.....Corning
Nelson, F. L.....Corning
Simpson, A. R.....Corning
Newkirk, C. H.....Datto
Richardson, M. C.....Datto
Hiller, J. P.....Pollard
Stewart, O. R.....Palatke
Hughey, M. C.....Rector
Lunt, J. P.....Leonard
Lynch, Richard Success
Waddle, M. V. B.....Success

Clark County.

J. H. Bell.....Arkadelphia
Daly, J. M.....Arkadelphia
Doane, S. A.....Arkadelphia
Moore, W. M.....Arkadelphia
Rowland, W. T.....Arkadelphia
Townsend, N. R.....Arkadelphia
Wallis, J. C.....Arkadelphia
Cuffman, J. H.....Gurdon

Cleveland County.

Hamilton, A. J.....Rison
Sadler, H. D.....Rison
Routh, Junius.....New Edinburgh
Carter, J. D.....Staves
Hartsell, R. J.....Annover
Wilson, H. O.....Kedron

Columbia County.

Baker, J. J.....Magnolia
Longino, H. A.....Magnolia
Smith, P. M.....Magnolia
Stevens, C. D.....Magnolia
Hill, C. H.....McKamie
Twitty, Walter Emerson
Vaughn, J. T.....Emerson
Walker, J. C.....Emerson
McDonald, A. J.....Taylor
Sauter, T. E.....McNeil
Sanders, G. P.....McNeil
Milner, C. D.....Milner
Cooksie, W. P.....Atlanta

Conway County.

Bradley, A. R.....Morrilton
Clark, C. D.....Morrilton
Logan, B. C.....Morrilton
Colay, J. H.....Cleveland
Goatcher, A. L.....Plumerville
Halbrook, J.....Center Ridge
Horton, Neal.....Plumerville
Jackson, J. H.....Center Ridge
Mason, W. L.....Hattieville

Craighead County.

Altman, J. T.....Jonesboro
Hale, C. S.....Jonesboro
Haltom, W. C.....Jonesboro
Jackson, W. W.....Jonesboro
Lutterloh, C. M.....Jonesboro
Lutterloh, P. W.....Jonesboro
Ramsey, J. W.....Jonesboro
Ratcliff, R. W.....Jonesboro
Stroud, H. A.....Jonesboro
McAdams, H. H.....Jonesboro
Armour, C. H.....Bono
Crawford, John E.....Bay
Grady, N. H.....Monett
Harrison, B. L.....Truman
Howell, J. C.....Nettleton
Nesbith, Frank.....Brookland
Rains, H. L.....Bay
Simpson, W. S.....Bono
Walker, B. F.....Nettleton

Crawford County.

Bennett, Burrel L.....Van Buren
Blakemore, J. E.....Van Buren
Bourland, O. M.....Van Buren
Dibrell, M. S.....Van Buren
Kirkland, Saml. D.....Van Buren
Lucas, Giles Van Buren
Parchman, W. L.....Van Buren
Posey, Ernest L.....Van Buren
Reeves, W. R.....Alma
Sharp, J. C.....Alma
Mitchell, J. D.....Uniontown
Wigley, J. A.....Mulberry

Crittenden County.

Hicks, W. P.....Earle
Mathews, J. H.....Earle
Mauney, S. M.....Earle
Hare, T. S.....Crawfordsville
Parker, A. C.....Clarksdale
Stevenson, S. M.....Crawfordsville
Smith, M. Parkin
McVay, L. C.....Marion

Dallas County.

Atkinson, H. H.....Fordyce
Harrison, F. E.....Fordyce
Hope, O. W.....Fordyce
March, C. J.....Fordyce
Kelly, M. D.....Carthage
Wozencraft, W. L.....Holly Springs
Taylor, Marvin Sparkman

Desha County.

MacCammon, Vernon...Arkansas City
Francis, J. W.....Arkansas City
Furbish, L. P.....McGehee
DeClark, W. H.....McGehee
Stewart, J. M.....McGehee
White, R. F.....McGehee
Price, C. C.....Dumas
Isom, A.....Dumas
Smith, H. T.....McGehee
Biscoe, Gibbs.....Pendleton

Drew County.

Brown, W. A.....Monticello
Collins, A. S. J.....Monticello
Corrigan, M. B.....Monticello
Cotham, E. R.....Monticello
Kimbro, S. O.....Monticello
Duckworth, F. L.....Monticello
Pope, M. Y.....Monticello
Chears, J. T.....Tillar
Chears, D. T.....Tillar
Stanley, A. C.....Tillar
Castile, H.....Winchester
Lisnbee, A. M.....Collins
Smith, R. N.....Collins

Faulkner County.

Brown, Geo. S.....Conway
Cureton, H. E.....Conway
Dickerson, C. H.....Conway
Greeson, W. R.....Conway
Huddleston, G. D.....Conway
McCollum, I. N.....Conway
McMahan, J. E.....Conway
Muse, J. M.....Conway
West, W. J.....Conway
Westerfield, J. S.....Conway
Munn, J. B.....Vilonia
Downs, J. H.....Vilonia
Henderson, G. L.....Greenbrier
Watson, T. C.....Mt. Vernon

Franklin County.

Blackburn, E. W.....Ozark
Douglass, Thos.....Ozark
Williams, H. F.....Ozark
Warren, G. D.....Ozark
Hodges, E. F.....Branch
King, W. J.....Branch
Akin, W. F.....Branch
Blakeley, T. B.....Coal Hill
Porter, W. C.....Coal Hill
Powell, J. M.....Coal Hill
Post, J. L.....Altus
Blakely, J. P.....Alix
Gibbons, W. H.....Webb City
Downey, R. L.....Cecil
Weaver, R. E.....Vesta
Harrod, J. C.....Denning
Jones, W. E.....Paris
Rambo, W. W.....Alston
Wear W. M.....Paris
Benefield, C. E.....Charleston

Grant County.

Kelly, O. R.....Sheridan
Butler, J. L.....Sheridan
Jones, J. E.....Sheridan
Shaw, J. B.....Sheridan
Caple, C. B.....Grape Vine
Young, J. K.....Hot Springs

Greene County.

Baker, E. S.....Paragould
Bridges, G. P.....Paragould
Dickson, H. N.....Paragould
Dickson, P. L.....Paragould
Ellington, W. E.....Paragould
Haley, R. J.....Paragould
Hopkins, G. T.....Paragould
Hardesty, C. A.....Paragould
McKenzie, J. G.....Paragould
Owens, W. R.....Paragould
Scott, F. M.....Paragould
Wilson, Olive.....Paragould
Tynor, H. V.....Paragould
Cothren, Thad.....Walcott
Majors, W. W.....Walcott
Bradsher, R. E.....Marmaduke
Cohn, Geo. St. Francis
Graham, M. C.....Gainsville
Lamb, Jones Beech Grove

Hempstead County.

Cannon, J. E.....Hope
Carrigan, P. B.....Hope
Farrow, W. D.....Hope
Garrett, H. J. F.....Hope
Gillispie, L. J.....Hope
Kelley, John L.....Hope
Russell, M. V.....Hope
Smith, Don Hope
Weaver, J. H.....Hope
Weaver, R. E.....Hope
Waddle, J. S.....Hope
Autry, J. B.....Columbus
Bell, Minto Blevins
B'Shers, H. L.....Texarkana
Garner, T. J.....Washington
Gentry, J. E.....Belton
McKinney, Z. H.....Fulton
Hayes, R. E.....Fulton
Robin, W. F.....Ozan

Hot Spring County.

Bramlitt, E. T.....Malvern
Hodges, W. G.....Malvern
Hardy, H.....Malvern
McCray, E. H.....Malvern
Phillips, R. Y.....Malvern
Williams, J. M.....Malvern
Cox, J. A.....Donaldson

Garland County.

Barry, L. H.....Hot Springs
Biggs, Orvis.....Hot Springs
Bush, J. W.....Hot Springs
Burton, O. H.....Hot Springs
Connell, W. H.....Hot Springs
Cox, W. E.....Hot Springs
Chesnutt, Jas. H.....Hot Springs
Collings, H. P.....Hot Springs
Collings, S. P.....Hot Springs
Cook, A. H.....Hot Springs
Dake, C.....Hot Springs
Dake, W.....Hot Springs
Deadrick, W. H.....Hot Springs
Davis, R. G.....Hot Springs
DeWoody, L. C.....Hot Springs
Drennen, C. Travis.....Hot Springs
Ellsworth, C. H.....Hot Springs
Ellis, L. R.....Hot Springs
Fewkes, J. W.....Hot Springs
Grey, D. A.....Hot Springs
Garnett, A. S.....Hot Springs
Harrell, M. L.....Hot Springs
Halman, V. H.....Hot Springs
Hebert, G. A.....Hot Springs
Henderson, W. B.....Hot Springs
Holland, T. E.....Hot Springs
Horner, J. S.....Hot Springs
Holland, E. D.....Hot Springs
Johns, P. W.....Hot Springs
Jelks, F. W.....Hot Springs
Jelks, J. T.....Hot Springs
Laws, M. V.....Hot Springs
Lanning, W. B.....Hot Springs
Livingston, J. J.....Hot Springs
Martin, E. H.....Hot Springs
Mobbs, B.....Hot Springs
Mount, M. F.....Hot Springs
McConnell, C. A.....Hot Springs
McClendon, J. W. Hot Springs
Purdum, E. A.....Hot Springs
Proctor, J. M.....Hot Springs
Randolph, J. P.....Hot Springs
Rider, E. B.....Hot Springs
Robertson. J. A.....Hot Springs
Rowland, J. F.....Hot Springs
Sanders, T. E.....Hot Springs
Shaw, A. D.....Hot Springs
Shaw, J. B.....Hot Springs
Short, Z. N.....Hot Springs
Snyder, W. L.....Hot Springs
Steele, S. B.....Hot Springs
Smith, J. W.....Hot Springs
Smith, W. K.....Hot Springs
Strachan, J. B.....Hot Springs
Simpson, R. A.....Hot Springs
Strachan, H. M.....Hot Springs
Thompson, Loyd Hot Springs
Thompson, M. G.....Hot Springs
Thompson. M. G., Jr.....Hot Springs
Tribble, A. H.....Hot Springs
Thompson, E. L.....Hot Springs
Vaughan, P. T.....Hot Springs
Vines, F. P.....Hot Springs
Williams, A. U.....Hot Springs
Winegar, E. F.....Hot Springs
Williams, F. M.....Hot Springs
Weil, S. D.....Hot Springs
Wood, J. S.....Hot Springs
Wootten, W. T.....Hot Springs

Howard County.

Alford, T. A.....Murfreesboro
Roberts, J. L.....Murfreesboro
Dildy, E. V.....Nashville
Hale, A. W.....Nashville
Gibson, W. M.....Nashville
Hopkins, J. S.....Nashville
Hutchinson, D. A.....Nashville
Toland, W. H.....Nashville

Independence County.

Ball, W. F.....Batesville
Case, J. W.....Batesville
Craig, Stark Batesville
Dorr, R. C.....Batesville
Gray, F. A.....Batesville
Hinkle, C. G.....Batesville
Johnson, O. J. T.....Batesville
Kennerley, J. H.....Batesville
Lawrence, W. B.....Batesville
Evans, A. A.....Newark
Rodman, T. N.....Newark
Roe, J. B.....Newark
Long, W. J.....Sulphur Rock
Roberson, S. N.....Sulphur Rock
Baldwin, W. S.....Melbourne
Drennen, S. A.....Rush
Bone, O. L.....Cushman
Brewer, J. McDowell..Mountain View
Evans, L. T.....Mt. Pleasant
Gray, E. M.....Floral
Heyden, J.....Bethesda
Ivy, J. B.....Guion
Jeffery, Paul Bethesda
McAdams, V. D.....Cord
Saylors, G. S.....Floral
Wyatt, W. A.....Rosie
Wood, T. J.....Evening Shade

Jackson County.

Best, A. L.....Newport
Erwin, I. H.....Newport
Gray, C. R.....Newport
Jones, O. E.....Newport
Stephens, G. K.....Newport
Walker, H. O.....Newport
Watson, E. L.....Newport
Willis, L. E.....Newport
Graham, J. S.....Tuckerman
Jamison. O. A.....Tuckerman
Kimberlin, K. K.....Tuckerman
Slaydon, L. T.....Tuckerman
Boyd, F. M.....Graysonia
Causey, G. A.....Swifton
George, C. E.....Grubbs
Martin, C. W.....Georgetown
Wilson, W. F.....Elmo

Jefferson County.

Breathwith, W. M.....Pine Bluff
Blankenship, W. H.....Pine Bluff
Caruthers, C. K., Jr.....Pine Bluff
Crump, J. F.....Pine Bluff
Gill, J. F.....Pine Bluff
Glover, C. A.....Pine Bluff
John, J. W.....Pine Bluff
Jordan, A. C.....Pine Bluff
Jenkins, J. S.....Pine Bluff
Lemons, J. M.....Pine Bluff
Liberman, J. F.....Pine Bluff
McMullen, E. C.....Pine Bluff
Luck, B. D.....Pine Bluff
Palmer, J. T.....Pine Bluff
Pittman, G. W.....Pine Bluff
Rowell, F. C.....Pine Bluff
Lowe, W. T.....Pine Bluff
Scales, J. W.....Pine Bluff
Smith, J. S.....Pine Bluff
Spylliards, J. S.....Pine Bluff
Thompson, A. G.....Pine Bluff
Troupe, A. W.....Pine Bluff
Williams, Harry, Jr.....Pine Bluff
Withers, J. W.....Pine Bluff
Woodul, T. W.....Pine Bluff
Shelton, M. A.....Wabbaseka
Wood. R. P.....Altheimer
Wright, C. E.....Graysonia

Johnson County.

Barger, M. I. Lamar
Burgess, M. E. Lamar
Burgess, T. E. Lamar
Bradley, Jno. F. Lamar
Manly, Robt. N. Lamar
Gray, L. C. Clarksville
Hays, A. Clarksville
Hunt, E. H. Clarksville
Hunt, Wm. R. Clarksville
Kolb, J. S. Clarksville
Robinson, Chas. E. Little Rock
Cook, L. A. Myndus, New Mex.
Graves, S. M. Mt. Levi
Love, John G. Hartman
Ogilvie, J. W. Harmony
Hardgrave, G. L. Edna

Lafayette County.

Baker, F. E. Stamps
Hoover, A. S. Stamps
Bright, D. W. Lewisville
Youmans, F. W. Lewisville
Colquitt, S. W. Cummins
McKnight, J. F. Walnut Hill

Lawrence County.

Hatcher, Wright Imboden
Henderson, A. G. Imboden
Land, J. C. Walnut Ridge
Hughes, J. C. Walnut Ridge
McCarroll, H. R. Walnut Ridge
Neece, T. C. Walnut Ridge
Ponder, E. T. Walnut Ridge
Smith, W. A. Walnut Ridge
Swindle, J. C. Walnut Ridge
Townsend, C. C. Walnut Ridge
Watkins, G. M. Walnut Ridge
Elders, J. W. Alicia
Smith, F. D. Alicia
Ball, C. C. Ravendon
Guthrie, T. C. Jessup
Johnson, Wm. Hardy
Morris, J. W. Black Rock
Robinson, W. J. Portia
Stephens, J. M. Minturn
Stidham, J. H. Hoxie
Warren, G. A. Black Rock

Lee County.

Bean, W. B. Marianna
Bogart, H. D. Marianna
Longley, W. W. Marianna
Wall, E. D. Marianna
Williamson, O. L. Marianna
Chaffin, C. W. Moro
Wilsford, A. L. Moro
Foster, G. F. LaGrange
Russwurm, C. S. LaGrange
Beaty, W. S. Vineyard
Nicholson, H. E. Askew
Haynie, Wm. R. Haynes
Bradford, W. S. Haynes
White, Harry Rondo
Harris, M. L. Aubrey

Little River County.

Kirkham, Z. L. Ashdown
Marr, S. C. Ashdown
Phillips, P. H. Ashdown
Ringgold, J. W. Ashdown
York, W. W. Ashdown
Mitchell, J. B. Foreman
Shackelford, T. T. Foreman
Shirey, W. L. Foreman
Stevens, D. L. Foreman
Cathey, A. B. Wilton
Peavy, J. L. Winthrop
Vaughan, W. E. Richmond

Lincoln County.

McClain, J. K. Star City
Tarver, B. F. Star City
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Watt, J. D. Tyro
Dixon, Chas. W. Douglass

Logan County.

Armstrong, N. E. Booneville
Baker, F. P. Booneville
Hederick, A. R. Booneville
McConnell, S. P. Booneville
Stewart, John Booneville
Bennett, W. H. Paris
Foster, M. E. Paris
Smith, J. J. Paris
Smith, A. M. Paris
Thompson, R. C. Paris
Harkins, R. A. Ratcliff
Lipe, E. N. Blaine
Scott, Earl E. Magazine

Lonoke County.

Abbott, C. C. England
Beaty, S. S. England
Chenault, J. C. England
England, John F. England
Murchison, A. J. England
Ward, O. D. England
Benton, T. E. Lonoke
Corn, F. A. Lonoke
Cunning, Jno. R. Lonoke
Southall, S. A. Lonoke
Brewer, John F. Kerr
Calahan, A. E. Hazen
Campbell, W. A. Latour
Granberry, G. W. Cabot
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Thibault, H. Scott
Crowgey, W. B. Scott
Fly, T. M. Little Rock

Madison County.

Roberts, D. C. Huntsville
Youngblood, F. Huntsville
Callen, C. B. Hindesville
Callen, L. H. Hindesville
Acree, W. E. Marble
Potts, J. R. Spring Valley
Counts, G. D. Wesley
Spurgeon, J. H. Aurora

Miller County.

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Dale, J. R. Texarkana
Dale, J. R., Jr. Texarkana
Dale, Rodney Texarkana
Dixon, B. E. Texarkana
Fuller, Earl Texarkana
Grant, R. L. Texarkaua
Kelley, K. M. Texarkana
Kittrell, T. F. Texarkana
Kosminskey, L. J. Texarkana
Hibbitts, Wm. Texarakna
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White, J. N. Texarkana
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Center, W. B. Garland
Cook, J. C. Garland

Mississippi County.

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Howton, O. Osceola
Dunavant, H. C. Osceola
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Craig, E. E. Wilson
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Turrentine, A. E. Blytheville
Usrey, M. O. Blytheville
Hudson, T. F. Luxora
McCall, W. S. Barfield
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Hill, E. V. Yarbro
Owens, W. H. Joiner

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Murphy, N. E. Clarendon
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Thomas, P. E., Jr. Clarendon
Murphy, F. T. Brinkley
McKnight, E. D. Brinkley
Stont, T. J. Brinkley
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Sylar, T. B. Holly Grove
Bradley, W. T. Monroe
Terry, P. D. Blackton

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Buchanan, A. S. Prescott
Buchanan, G. A. Prescott
Gee, S. B. Prescott
Hesterly, J. B. Prescott
Hesterly, S. J. Prescott
Reader, A. A. Prescott
Rice, W. W. Prescott
Sandlin, J. T. Emmet
Garner, W. M. Bodcaw

Ouachita County.

Davison, A. Camden
Early, C. S. Camden
Meek, J. W. Camden
Newton, W. L. Camden
Powell, B. V. Camden
Rinehart, J. S. Camden
Word, N. S. Camden
Purifoy, W. A. Chidester
Rushing, J. L. Chidester
Byrd, E. J. Millville
Haltom, N. F. Buena Vista
Henry, H. H. Eagle Mills
Mahan, J. M. Bearden
Simmons, W. H. Fordyce
Thompson, J. S. Stephens

Phillips County.

Altman, C. G. Helena
Cox, A. W. Helena
Cox, A. E. Helena
Ellis, J. B. Helena
Fink, M. Helena
King, W. C. Helena
Henry, M. Helena
Nichols, J. W. Helena
Orr, W. R. Helena
Rembert, J. C. Helena
Rightor, H. H. Helena
Russworm, W. C. Helena
Trotter, C. H. Helena
Thompson, H. M. Marvell
Bean, J. W. Marvell
Bruce, W. B. Marvell
Parker, Ollie Elaine
Hall, L. Turner
Holtzclaw, J. F. Poplar Grove
Brown, E. P. Lexa
Kultgen, Edward Elaine

Polk County.

Dunman, G. P. Mena
Fletcher, T. M. Mena
Hawkins, Ben H. Mena
Hilton, J. G. Mena
Watkins, P. R. Mena
Vandiver, W. C. Mena
Connelly, D. W. Hatfield
Davis, J. R. Fort Smith
Lee, F. A. Wicks
Parks, W. P. Hot Springs
Morris, R. D. Gerty, Okla.

Poinsett County.

Alexander, M. S. Weiner
Yarbrough, R. E. Harrisburg

Pope County.

Campbell, J. M. Russellville
Linzy, J. R. Russellville
Powell, J. W. Russellville
Wright, Jerome Russellville
Montgomery, W. A. Atkins
Kolb, W. B. Atkins

Prairie County.

Ellis, C. S. Hazen
Porter, T. G. Hazen
Lynn, J. R. Hazen
Hipolite, F. A. DeVall's Bluff
Hipolite, W. W. DeVall's Bluff
Parker, James DeVall's Bluff
Gilliman, J. C. Des Arc

Perry County.

Kubale, Edwin Fourche
Reiff, W. L. Perryville
Jones, R. A. Houston

Pulaski County.

Howell, A. R. Argenta
Prothro, H. Argenta
McKinney, A. T. Argenta
Arkebauer, C. A. Little Rock
Bailey, W. E. Little Rock
Bathurst, Wm. R. Little Rock
Bentley, E. Little Rock
Bentley, C. E. Little Rock
Bond, S. P. Little Rock
Browning, H. W. Little Rock
Caldwell, R. Little Rock
Carmichael, A. L. Little Rock
Cates, Thos. H. Little Rock
Chesnutt, C. R. Little Rock
Day, E. O. Little Rock
Daly, M. G. Little Rock
Darnell, R. F. Little Rock
Dashiell, Wm. A. Little Rock

Davis, E. N.....Little Rock
Dibrel, J. L.....Little Rock
Dibrel, J. R.....Little Rock
Doyne, C. R.....Little Rock
Dooley, J. B.....Little Rock
Dunaway, W. C.....Little Rock
Eubanks, R. M.....Little Rock
Falisi, J. V.....Little Rock
Fletcher, Geo. B.....Little Rock
Flinn, B. W.....Little Rock
French, F. L.....Little Rock
Freemeyer, W. N.....Little Rock
Garrison, C. W.....Little Rock
Gibson, L. P.....Little Rock
Gray, Oscar Little Rock
Hankinson, O. C.....Little Rock
Hardeman, D. R.....Little Rock
Harris, A. E.....Little Rock
Hodges, E. E.....Little Rock
Holiman, J. E. T.....Little Rock
Holmes, Glenn M.....Little Rock
Hudson, E. M.....Little Rock
Hughes, W. B.....Little Rock
Jobe, A. L.....Little Rock
Johnston, E. E.....Little Rock
Judd, O. K.....Little Rock
Kirby, H. H.....Little Rock
Kory, R. C.....Little Rock
Lamb, W. A.....Little Rock
Lenow, Jas. H.....Little Rock
McCaskill, M. E.....Little Rock
McCormick, A. G.....Little Rock
McCurry, W. T.....Little Rock
McGill, A. G.....Little Rock
McRae, W. M.....Little Rock
Manglesdorf, W. F.....Little Rock
May, W. S.....Little Rock
Meek, E.....Little Rock
Meriwether, C. P.....Little Rock
Miller, W. H.....Little Rock
Murphy, Pat.....Little Rock
Ogden, M. D.....Little Rock
Pate, C. N.....Little Rock
Pettus, C. S.....Little Rock
Reagan, L. D.....Little Rock
Reed, C. C.....Little Rock
Robinson, F. C.....Little Rock
Runyan, J. P.....Little Rock
Saxon, R. L.....Little Rock
Scarborough, J. I.....Little Rock
Scott, C. V.....Little Rock
Shinault, C. R.....Little Rock
Shipp, A. C.....Little Rock
Sheppard, J. P.....Little Rock
Smith, Morgan.....Little Rock
Smith, W. F.....Little Rock
Snodgrass, W. A.....Little Rock
Stover, A. R.....Little Rock
Strauss, A. W.....Little Rock
Vinsonhaler, F.....Little Rock
Walt, D. C.....Little Rock
Watkins, A.....Little Rock
Watkins, J. G.....Little Rock
Wayne, J. R.....Little Rock
Witt, C. E.....Little Rock
Zell, A. M.....Little Rock
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Saline County.

Crawford, J. B.....Benton
Gann, Dewell Benton
Kelly, W. Benton
Phillips, J. W.....Benton
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Steed, C. J.....Alexander
Ward, W. W.....Alexander
Burgess, F. C.....Owensville
Elliott, J. E.....Carlisle
Graham, A. J.....Little Rock
Gann, Dewell, Jr.....Little Rock
Melton, J. W.....Slocomb
Prickett, C.....Traskwood

Sebastian County.

Brooksher, W. R.....Fort Smith
Brooksher, S. L.....Fort Smith
Buckley, J. H.....Fort Smith
Bumgart, C. S.....Fort Smith
Cooper, St. Cloud.....Fort Smith
Dorente, D. R.....Fort Smith
Eberle, J. G.....Fort Smith
Epler, E. G.....Fort Smith
Eberle, Walter.....Fort Smith
Foltz, Jas. A.....Fort Smith
Foster, J. H.....Fort Smith
Foster, M. E.....Fort Smith
Goldstein, D. W.....Fort Smith
Hardin, A. E.....Fort Smith
Hampson, J. K.....Fort Smith
Hoge, A. F.....Fort Smith
Holt, C. S.....Fort Smith
King, H. C.....Fort Smith
Johnston, Hugh.....Fort Smith
Johnson, J. E.....Fort Smith
Lindsey, E. L.....Fort Smith
Moulton, Evert.....Fort Smith
Morrissy, A. J.....Fort Smith
Moulton, H.....Fort Smith
McGinty, J. M.....Fort Smith
Neal, J. Hal, Jr.....Fort Smith
Ozment, S. J.....Fort Smith
Riddler, P. A.....Fort Smith
Rose, Willis Fort Smith
Wilson, Cons P.....Fort Smith
Ryan, I. A.....Fort Smith
Southard, J. D.....Fort Smith
Wolferman, S. J.....Fort Smith
Wyatt, R. B.....Fort Smith
Wood, Clark.....Fort Smith
Wallace, John M.....Fort Smith
Hall, C. W.....Greenwood
Perry, I. T.....Greenwood
Woods, G. G.....Huntington
Bollinger, I. W.....Henryetta. Okla.
Carlin, R. G.....New York City
Harris, Bunn.....Jenny Lind
Means, C. S.....Jenny Lind
Parks, R. F.....Bonanza
Coffman, J. S.....Lavaca
Jones, E. B.....Hartford

Searcy County.

Cotton, J. O.....Leslie
Robertson, L. D.....Leslie
Butler, J. S.....Marshall
Daniel, S. G.....Marshall
Wood, E. W.....Marshall
Henley, J. A.....St. Joe
Rogers, William F.....St. Joe
Stephenson, A. J.....Okemoh, Okla.
Melton, A. S.....Snowball

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Alley, W. H.....Forrest City
Bogart, J. A.....Forrest City
Merritt, L. H.....Forrest City
Pelton, D. A.....Forrest City
Rush. J. O.....Forrest City
Chaffin, E. J.....Hughes
Caldwell, A. B.....Caldwell
McCowan. N. C.....Palestine
Purnell, R. L.....Madison
Reynolds, J. C.....Colt

Sevier County.

Archer, C. A.....DeQueen
Hendricks. J. S.....DeQueen
Hopkins, R. L.....DeQueen
Kitchens, C. E.....DeQueen
Wisdom, W. E.....DeQueen
Hopson. E. W.....Lockesburg
McCroskie, M. R.....Lockesburg
Norwood, M. L.....Lockesburg
Glinghan, A. J.....Lockesburg
Guthrie, J. E.....Brownstown
Isbell, F. T.....Horatio
Musser, J. F.....Ben Lomond

Union County.

Hilton, R. A.....El Dorado
Mitchell, J. G.....El Dorado
Moore, J. A.....El Dorado
Mahoney, F. O.....El Dorado
McGraw, S. J.....El Dorado
Niehuss, H. H.....El Dorado
Purifoy, L. L.....El Dorado
Wharton, J. B.....El Dorado
Burns, R. P.....Calion
Elkins, W. N.....Junction
Irby, F. L.....Wesson
Jarrell, Foster Huttig
Norton, J. M.....Mt. Holly
Self, J. I.....Mt. Holly
Miles, W. L.....Junction City
Mayfield, A. M.....Shuler
Murphy, H. A.....Wesson
Murphy, George W.....Strong
Slaughter, J. W.....Wesson
Rowland, R. E.....Little Rock

Washington County.

Christian, D.....Springdale
Henry, R. T.....Springdale
Leininger, Phoebe Springdale
Martin, J. E.....Springdale
Perkins, C. F.....Springdale
Ellis, E. F.....Fayetteville
Gregg, A. S.....Fayetteville
Gabbert, W. T.....Fayetteville
Harr, H. T.....Fayetteville
Hardin, Nina V.....Fayetteville
Miller, Otey Fayetteville
Paddock, C. B.....Fayetteville
Southworth, James.....Fayetteville
Wood, H. D.....Fayetteville
Yates, W. N.....Fayetteville
Walker, J. W.....Fayetteville
Welch, W. B.....Fayetteville
Carter, N. D.....Harris
Graves, H. W.....Elm Springs
Batchelder, F. P.....Farmington
Mock, W. H.....Prairie Grove
Summers, D. C.....Elm Springs
Young, F. B.....Gering, Neb.
Hathcock, P. L.....Lincoln
Pittman, James.....Cincinnati
Canon, J. S.....West Fork

White County.

Cleveland, J. C.....Bald Knob
Clark, W. A.....Bald Knob
Hassell, J. W.....Searcy
Jelks, J. M.....Searcy
Jones. J. L.....Searcy
Majors, I. R.....Searcy
Moore, L. E.....Searcy
Tapscott, S. T.....Searcy
Harrison, A. G.....Kensett
Holt, Zene.....Kensett
Abington, W. H.....Beebe
Frazier, N. E.....Pangburn
Hassell, A. B.....Rosebud
Hudgins, A. H.....Higginson
Miller, W. J.....Griffithville
Nowlin, R. F.....West Point

Woodruff County.

Biles, L. E.....Augusta
Brewer, E. F.....Augusta
Dungan, C. E.....Augusta
Patterson, R. Q.....Augusta
Smith, R. N.....Augusta
Bradford, T. B.....Cotton Plant
Brown, E. B.....Cotton Plant
Gephart, R. T.....Cotton Plant
McKnight, C. H.....Cotton Plant
Maguire, F. C.....Gregory
Fletcher, B. A.....McClellan
Brewster, B. McCrory
Morris, J. W.....DeView
Ragsdale, V. H.....Fitzhugh

Yell County.

Albright, J. L.....Plainview
Ballinger, W. E.....Plainview
Linzy, C. B.....Plainview
Gillem, A. D.....Rover
Harkness. J. H.....Belleville
Grace, John.....Belleville
Love, L. E.....Dardanelle
Montgomery, H. L.....Gravelly
Worsham, M. A.....Centerville
Jackson, N. H.....Casa
Moore, J. H.....Delaware

NNUAL SESSION, LITTLE ROCK, MAY 1, 2, 3

THE JOURNAL OF THE Arkansas Medical Society

Owned and Published Monthly by the Arkansas Medical Society

LUME XIII
No. 8

LITTLE ROCK, JANUARY, 1917

Yearly Subscription $1.00
Single Copy 25c

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THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIII. LITTLE ROCK, ARK., JANUARY, 1917 No. 8

Original Articles.

PLASTIC SURGERY OF THE NOSE AND EYELIDS—REPORT OF SOME CASES.*

By L. Herbert Lanier, M. D.,
Texarkana.

The deformities, or malformations, which call for plastic proeedure are numerous; and whether the condition to be corrected is caused by traumatic injury, or is due to disease, the technic is complicated, and many varieties and modifications of methods must be employed in rhino-plastic operations.

The indications for plastic surgery of the nose have, heretofore, been chiefly the re-establishment of respiration, phonation and deglutition, but I predict a great increase in the number of operations of this character to satisfy cosmetic requirements, since, because of deformities and malformations of the face or nose, many individuals are denied the privilege of equal chance in life with their fellowman.

No single step in plastic surgery can be ignored if success is attained; while almost any form and size of defect in the skin may be covered without causing a marked deformity in the region from which the tissues are taken; yet, if some general or local pathological conditions, such as tuberculosis, lues, general anemia, malnutrition, etc., is present, and not corrected before operation, failure will ensue. The age, condition and vocation of the patient must be considered in the selection of the method of operative procedure; however, the particular method used is to be chosen, in each case, by the individual operator, since no two cases are alike; but the most successful operators think it best to form the nasal structure by employing transplantation methods, in preference to using flaps from the face or forehead; but I cannot agree with those who advocate intranasal in preference to external methods. Of course, the deformity through scar tissue is less in the former, but the danger of infection is less in the latter.

Asepsis is impossible in nasal surgery; yet, by thorough preparation before operation, no foreign micro-organism is introduced into the wound. All flaps transplanted should be one-third larger than the newly formed nose, and no tension must be exerted anywhere on the flap, and blood vessels subjected to very little twisting.

Since extensive skin grafting has proven so satisfactory, the fear of leaving contracted and disfiguring areas is noticeably less.

Implantation for the correction of defects, or malformations of the nose, consisted of the use of gold, hard rubber, paraffin, German silver, wire, etc., but have been generally abandoned for the plastic operation, inasmuch as these foreign bodies very frequently had to be removed, because they became the seat of irritation.

The correction of some nasal deformities, by the aid of artificial devices, is best where certain anatomic and pathologic conditions are present; for instance, in advanced cases of carcinoma and lues, or in cases where the nose is all scarred up, plastic operations are not successful.

Spectacles and adhesive paste hold these artificial noses in place; and so far as appearance is concerned, an artificial nose is better than one resulting from the best surgical proedure.

No plastic operation on the nose should be done before a Wassermann blood test is made. Severe anemia and malnutrition must receive the strictest recognition.

CASE.—Mr. H. G., age twenty-four, American; no history of constitutional disease; suffered from accidental discharge of rifle, while

*Read before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2, 3, 4, 1916.



Illustrating Case No. 1, Dr. Lanier's paper.

looking down wrong end of same, causing the hammer to strike a stump, causing partial loss of lip and one side of the nose and some of the cartilaginous septum.

I did a rather extensive submucous resection on another patient, and transplanted part of the cartilage removed to the injured patient's septum, for support, with complete healing in ten days; then I operated to cover remaining deformity, rather following the Busch method of forming a lateral flap with the pedicle on the opposite side, to the defect of the ala, with the main body of the flap made from the bridge of the nose; then the undesirable skin margin of the defect is removed. Next dissect the flap and suture in position, the prominent convex border of the flap being fitted into outer margin of the defect. The tongue-shaped portion makes a well-adjusted tip and columella covering; the newly formed defect was covered two weeks later with thiersch grafts, and the pedicle severed.

CASE 2.—Mr. R. S., age forty-four, farmer, American; no history of constitutional disease; was injured in a fight, his opponent using a knife on him with following result:

Beginning at the outer supraorbital margin of left side, two millimeters above outer canthus, the knife blade severed upper eyelid while directed away from the body, then the blade was turned, making a circular incision, completely destroying two or three millimeters of upper lid, and about three-eighths of an inch of lower lid, which loss included adjacent conjunctiva.

The patient, when presented to me for treatment, several months after the injury, had cataract of traumatic origin, dating from injury. He had a partial symblepharon corresponding to denuded area around eyelids, and a fistulous sinus extending from outer canthi, at angle of about sixty-five degrees; through ocular conjunctiva lower lid, and extending clear across cheek to the nose.

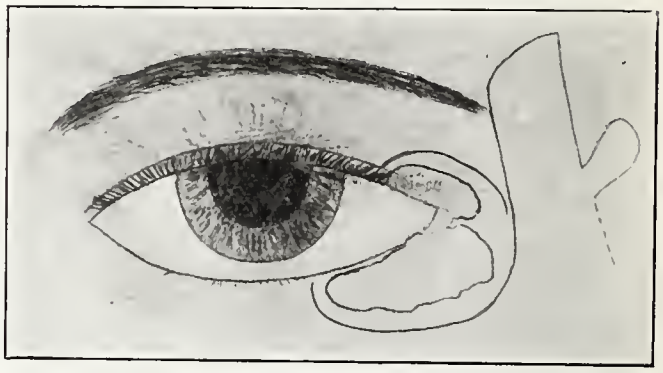


FIG No. 1—Illustrating Case No. 2, Dr. Lanier's paper.

OPERATION.—The eyelid was separated from the globe, and the defects covered with vertical stretched flaps of conjunctiva, stitched into place. After having dissected out the fistulous sac, which, after thoroughly scraping and washing with mercuric chlorid, was packed into defect caused by loss of tissue at outer canthus, and this also covered with stretched conjunctiva, leaving skin defect of both upper and lower lid uncovered, which subsequently was remedied by a blepharoplas-

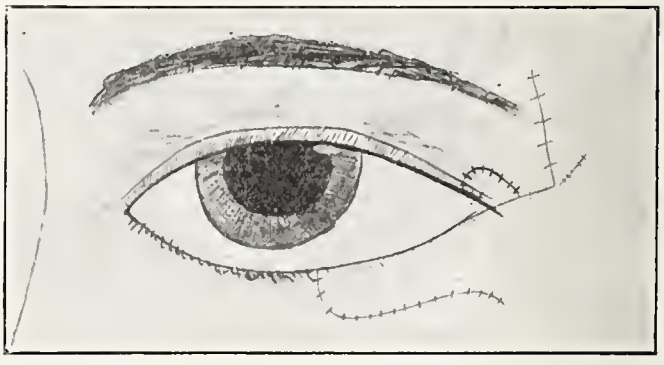


FIG. No. 2—Illustrating completed operation in Case No. 2, Dr. Lanier's paper.

tic operation, or by a transplantation of a piece of skin bearing a pedicle as follows: neighboring tissue on forehead a little larger than the defect on both lids, and like it in shape, was loosened by one slightly curved, and one vertical, incision, making a bistoury-

shaped flap, with tongue-shaped portion for upper lid, which covered defect nicely. A few sutures were used, a dry dressing applied, and inspection on third day revealed results most satisfactory to myself and patient.

All that has been previously mentioned, with reference to asepsis and tension on transplanted flaps in plastic work on nose, applies also to plastic surgery of eyelids.

Wherever possible, the pedicle should include a good-sized blood vessel, and twisting of the pedicle avoided. Numerous sutures add to the danger of infection. The wound should not be touched for two or three days; a dry dressing should be applied. Good results usually follow the technic outlined, unless the patient be a syphilitic.

DISCUSSION.

Dr. D. R. Dorente (Fort Smith): The essayist has given us a very interesting and instructive paper, as well as one very much out of the ordinary. It seems to me that the operator who undertakes major plastic surgery cannot receive too much credit, for in this particular branch of surgery there is a great demand made upon the operator for success. A great deal of attention must be paid to details. He must have a great deal of general knowledge of surgery, and he must be expert. In this branch of surgery, or in any other branch, there are general principles which govern the procedure; but it is in this kind of work, as in no other, that the skill of the individual in expert execution means success. Of course, the underlying principles, that of the rapid and secure union of the divided or freshened surfaces and the correct placement of the flaps, have to do also with the work. Dr. Lanier has covered the cases that he reported so thoroughly that there is not much to say about them in the way of discussion.

In the eye cases he shows a great deal of thought in planning his flap, and certainly his technic must have been perfect in placing that flap, because necessarily there must have been a little twisting, I presume. But, he evidently allowed for tension and saw to it that the nutrition of the flap was well taken care of.

These plastic operations done upon the face and the neck—and a majority of plastic operations are done on the face and neck—oftentimes require a great deal of nerve to undertake them, because it is a field that once you invade it there is no middle ground. You have changed it. You have either made it better, or you have made it worse. If you have made it better, everything is lovely for both the operator and the patient, and, if you have made it worse, then things are sometimes pretty warm for the surgeon.

It does not make any difference, it seems to me, just what particular general method might be used, whether you use the Italian method or whether you use the Indian method, so much as it depends upon the experience of the operator and his technic. I thank the doctor for his paper.

Dr. Lanier (closing): Dr. Dorente alluded to methods. I want to say that there are more methods in doing plastic work than there are methods in doing cataract operations (and that's a great many), and there are just as many methods as there are operators and patients, because every one is a law unto itself.

We have one thing to consider, of course, in doing this work, and that is we are not always operating on an aseptic field, and it will be well for us to remember that in reconstructive surgery no two cases are alike and the method of operating could not be alike. It is most important to transplant thoroughly and get perfect adaptation of the margins that no tension may occur.

I believe there is a great future in this work, for people engaged in rhino-plastic work, or eye, ear, nose and throat work. I have known people who were able to pay a handsome fee go to "beauty doctors," people who were not physicians, people who pretended to cure these defects. I know of untrained people using injections of paraffine to fill certain cosmetic requirements. That is illogical and should not be permitted; but in some instances they seem to do what the people want them to. They fill out the depressions and some of the wrinkles and give them a better appearance. I do think that there is in plastic surgery a wonderful field opened up for those who are willing to engage in it, and certainly you will not be rewarded with success in this particular line of work unless you pay a great deal of attention to it, as you will have to do in everything else.

I think that if eye, ear, nose and throat men would engage in this line of work, that a much-needed field of usefulness would be opened to us since we are permitting the opticians, incompetent as they are, and the optometrists to take away from us the larger part of the refractive work of the eye, then it would be well for us to do something in this particular direction.

We may not have so many requests to do work of this character in a place of this size, but in the larger cities more and more, all the while, there is a demand for this kind of work, and we should take hold of it. We are the men who ought to do it. If there is any chronic skin infection as eczema or granuloma, your results may be bad. At least, the work will be retarded, or, perhaps, altogether prevented.

In discussing this paper in our county society here, one of the physicians asked my experience in facial paralysis. Naturally, one would expect to find considerable disorganization of the nerve function, but the fact that I did not have it in the plastic operation on the eyelids and face in the case mentioned in my paper can probably be attributed to the fact that there is a very extensive distribution of the facial nerve and many communicating loops.

Muldoon, the trainer, attributes his admirable figure to his practice of trying to touch some imaginary object with the crown of his head.

One way to make yourself a good doctor is never to give a drug unless you know just what you expect it to do.

The more closely men study drug action and apply drugs with definite reason, the more they tend to the use of remedies singly.

The key to most of our puzzles and to clinical success is that which unlocks the bowels.

Itching is either parasitic or toxemic. The man who treats skin diseases locally without investigating causes would be a back number—only there is no such animile.

—Medical World.

APPARATUS FOR TRANSFUSION OF BLOOD BY THE SODIUM CITRATE METHOD.

By Nolie Mumey, M. D.,
Interne, City Hospital, Little Rock.

Before describing the apparatus it will be interesting to briefly review some of the literature on the subject, giving brief descriptions of various forms of apparatus.

HISTORY.—Transfusion dates back many centuries, but it was not used on a large scale until results were published in 1665 by Lower, and in 1667 by Denys, who applied it on human beings. Blundell transfused four cases, using 480 c.c. as the maximum amount; two cases ended fatally. Later on it was applied in a variety of diseases; in 1829 it was used in puerperal fevers. It became so extensively used by a large number of its exponents with varied results that the French government prohibited its use. In the nineteenth century it was revived and used in carbon-monoxid poisoning, eclampsia, leukemia, and postpartum hemorrhages.

Transfusion was first performed directly by glass cannula and rubber tubing; in some instances the blood was drawn from the donor and defibrinated by whipping, and then injected. When donors could not be obtained, blood from a sheep was used. This resulted in many accidents and uncertain results were obtained. Embolism was produced, infections easily transmitted and a large number of cases ended fatally, which led to further study on the subject and showed that the red blood cells were broken up when injected and proved that blood from dissimilar species could not be used.

The direct artery to vein anastomosis was considered the only correct means, but this was not used to any great extent. Finally it was decided that the only good done by blood transfusion was an increase in volume and the cells died outside of the vessel, and were of no vital importance when transfused. Toward the end of the century it was substituted by normal saline infusions, to be revived later by Carrel and others. The artery to vein anastomosis was very successful in keeping the blood from clotting by contact with the epithelial lining of the vessels, and was first performed by means of sutures, followed by various forms of cannulas as devised by Crile, Elsberg and others. Its use, however, on account of the complicated technic, was limited to those skilled in blood vessel surgery, which was a factor in developing the indirect method.

From the studies of Fruendal, Bordet and Genou, demonstrating that blood introduced into paraffin- and petroleum-coated vessels remained uncoagulated for several hours, led Brewer and Leggitt to use paraffin-coated tubes with success.

Later a paraffined glass cylinder of 300 c.c. capacity, with two cannulas at bottom connecting vein of donor to the vein of the recipient. The blood was drawn into the cylinder by a piston syringe, then forced into the vein of the recipient by means of a two-way stopcock. (Curtis and David.)

The syringe method was soon numbered among the list. Twelve record syringes which required three or four assistants. The blood was kept from clotting by preventing exposure from the air. (Lindemann.)

An improvement on this was the three-way stop-cock, which was worked with syringes on the principle of aspiration and injection, running saline through the circuit to keep it clean. (Devised by Unger.)

Another method was tried, in which the blood was defibrinated by allowing it to run into a sterile jar, containing glass beads and then agitated for ten minutes, filtering and giving by gravity at body temperature. (Moss.)

A glass cylinder which was fitted with a cork and side tube underneath, with a cannula leading from the bottom. It was autoclaved and paraffined. The donor's vein was dissected out and cannula introduced, allowing the blood to run in from the bottom, it being tilted in such a manner to relieve the upward pressure caused by the volume of blood. The vein of the recipient was dissected out and cannula introduced, the blood being forced into the vein by means of a rubber bulb attached to the side tube. (Kimpton and Brown.)

The complicated technic with the various apparatus proved so unsuccessful in many instances on account of the blood clotting, that investigators endeavored to find some anticoagulating substance that was nontoxic. Such was first found in hurudin, which is derived from the buccal glands of the pond leach. It showed some toxic effects in a few experiments and has not been used extensively. (Hooker and Satterlee.)

Sodium citrate 0.2 per cent, with equal parts of saline, was first used by Hustin, who carried out his experiments on animals. Later Weil ran a large series of citrate transfusions on man, using a 1 per cent solution. In some instances the blood was kept from three to five days before using, and produced only slight reactions. The citrate was introduced through a rubber tube which led to the vein of the recipient.

Lewisohn then took up this method experimentally and clinically working out the toxicity on dogs, showing that 1.5 grams of citrate was fatal to an eleven-pound dog, also that 15 grams would be fatal to a patient weighing 110 pounds. He punctured the vein with an eleven-gauge needle and collected the blood in a sterile jar, where it was mixed with a 2 per cent citrate and stirred with a glass rod and then given to the recipient through a salvarsan apparatus.

The harmful effects of sodium citrate in repeated injections was shown by Garbat, who injected 2 per cent solutions at various intervals in four patients who had no evidence of anemia, there being but slight reaction in each instance. In carrying out the transfusions he uses a $2\frac{1}{2}$ per cent stock solution in proportion 1 to 10, giving 0.25 per cent dilution. He claims that 0.2 per cent was not sufficient to keep the blood of some donors from clotting.

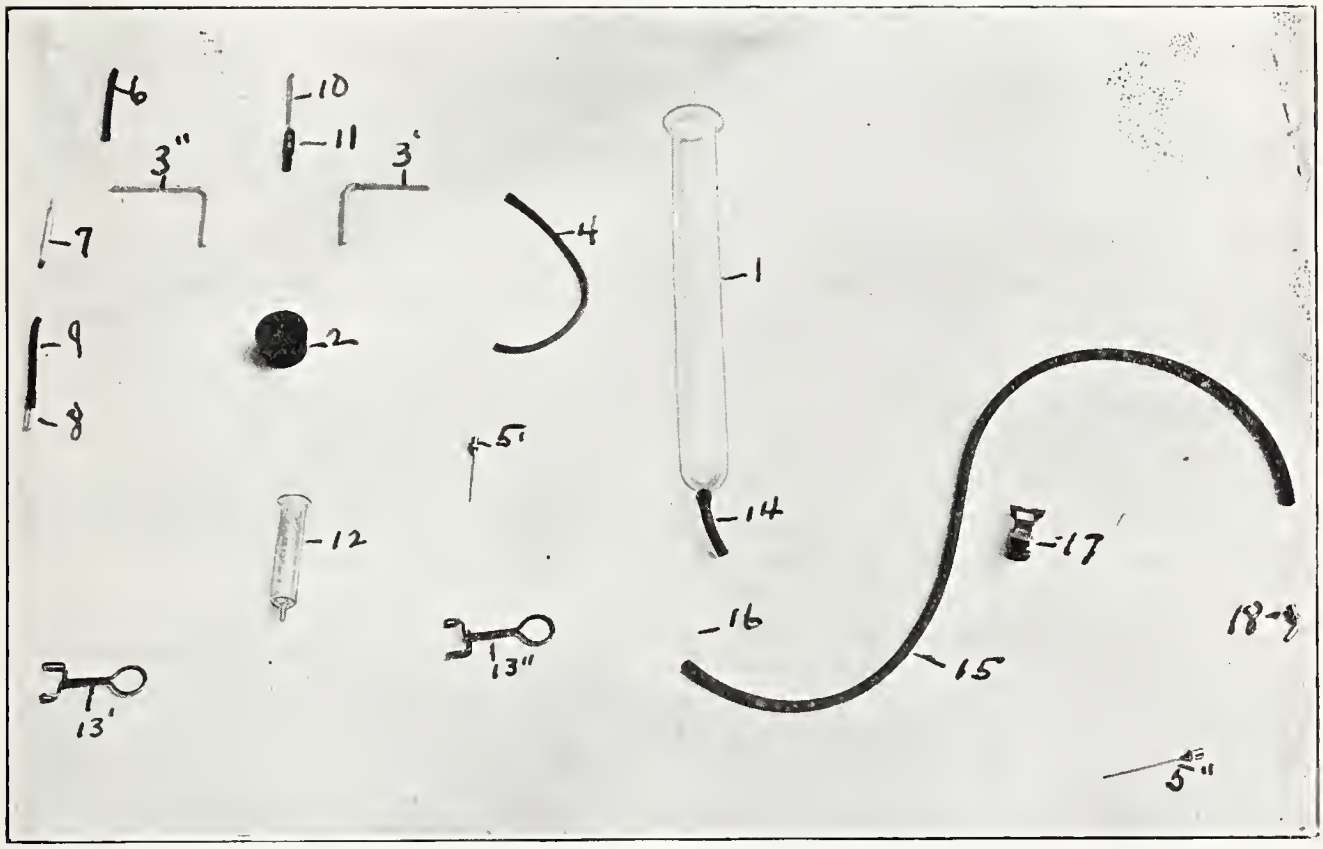


Plate A.—Illustrating article by Dr. Nolie Mumey.

Description of the Apparatus.

(See Plate A.)

Salvarsan tube, (1) into which is fitted a No. 8 rubber cork with the holes in center, (2) for two L-shaped pieces of glass tubing three-sixteenths of an inch in diameter, two by three inches long; (3) to one is attached a nine-inch piece of No. 10 American catheter rubber, (4) for connecting to No. 20 Luer needle, (5) to receive blood. The other L-shaped tube has catheter rubber two and one-half inches long connected to glass tubing which has been blown out in the center for sterile cotton. (7) This is attached to mouth-piece one and one-half inches long (8) by means of catheter rubber three inches long, (9) one straight piece of glass tubing three inches long (10) is fitted into third hole of cork; over the end is fitted catheter rubber one and one-half inches long (11) to which is attached the barrel of a 10-c.c. Luer syringe; (12) for mixing citrate it is regulated by a pinch-cock (13) fitted on rubber. A piece of rubber tubing one-quarter of an inch in diameter, two inches long, (14) fitted on bottom

of tube, which is applied pinch-cock (13). It is now ready for obtaining the blood. (Plate B.)



Plate B.—Illustrating article by Dr. Nolie Mumey.

Rubber tubing one-quarter of an inch in diameter, twenty-four inches long (15) to tube (14), by a straight piece of glass tubing two inches long (16), and is controlled by pinch-cock (17). On the free end of tubing is attached a curved slip joint (18), which fits into a Luer 20 needle (5). This completes the apparatus which is ready for giving the blood, as shown in (Plate C).

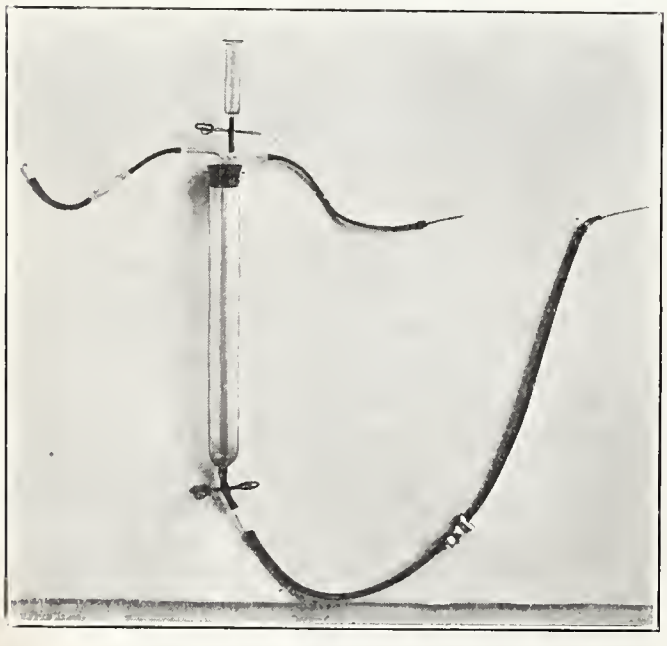


Plate C.—Illustrating article by Dr. Nolie Mumey.

Technic for Transfusion.

When connected as in Plate B, the needle is introduced in the vein of the donor and a vacuum is created by the mouth, through sterile cotton. The blood runs in a steady stream as long as the vacuum is maintained. It is mixed with a $2\frac{1}{4}$ per cent solution of sodium citrate, in proportion of 1 to 10, from the syringe barrel, by the aid of an assistant. The cylinder should be carefully shaken at intervals to get a thorough mixture with the citrate. After the tube is full of blood, it is then given, by connecting the rubber tubing on bottom of it with the glass connection (Plate C). The needle is introduced into the vein of the recipient and connected to apparatus by the curved slip joint; blood then flows in by gravity and can be regulated by raising or lowering the tube. If a large amount is needed, two salvarsan tubes can be used. The top of apparatus may be transferred to other tube and more blood collected, while the first tube full is being given.

It is well to run citrate through all parts with which the blood comes in contact, before using. The rubber tubing on bottom should be filled with citrate before connecting, to obviate the chances for clotting and to expel the air, which is partly accomplished by connecting while running.

This method has been successfully tried on three clinical cases, 240 c.c. of one tube full being the highest amount given.

Conclusion.

The apparatus can be easily constructed; it does not require autoclaving; can be boiled. Repeated transfusions can be given at short intervals in a home or on hospital ward. Amount can be accurately measured; the rate of flow regulated; blood does not need be transferred from one vessel to another; it is not necessary to dissect the veins; one assistant is all that is needed.

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NEPHROLITHIASIS.*

By J. P. Runyan, M. D.,
Little Rock.

Renal calculus, or stone in the kidney, is sufficiently frequent to be of more than passing interest to the general practitioner as well as the surgeon. In fact, when the severity of the attack, and its immediate and ultimate dangers are taken into consideration, with the excellent results following operation on the other hand, it becomes the most important consideration for all the members of our profession. Mumford says that stone in the kidney concerns the surgeon more than any other renal disease.

The urine of a person may contain crystalloids in an abnormal amount, yet so long as they are held in solution by the action of colloids, no stone will form. If, however, the crystalloids are present in excessive amounts, over the power of the colloids, the crystalloids are deposited, which is the beginning of formation of the calculus.

Renal calculi have not been proven to follow an infection of the urinary tract, as is the case of gall-stones in the biliary tract. Though it is strongly thought that an infection usually precedes the formation of the renal calculi. The uric acid, carborates of lime and oxalate of lime stones are generally considered primary calculi, and do not, so far as we can learn, follow an infection; while the tripple phosphates are quite frequently preceded by an infection of the urinary tract.

The right kidney is more often affected than the left. Both kidneys are involved in from 20 to 50 per cent of cases. Renal calculi are found in persons of all ages, though they are rare before puberty. They occur in males more often than in females.

The smaller the calculi, the greater their number, and the more apt are they to produce symptoms.

The stones vary in size from microscopic crystals to masses as large as a hen's egg, or larger. Barrow, of Lexington, reported a case weighing sixteen ounces.

The usual location of the stones is in the pelvis, though they are frequently found in the cortex or in the calices. In the calices the stone is coral in shape. The stones may be continuous from the renal pelvis to the ureter and in the ureter.

The passing of these small calculi down the ureters causes intense agony and a condition of hydronephrosis happens intermittently. If the kidney is aseptic, chronic interstitial changes occur; if in a septic condition, a calculous pyelitis will result, with a pyelonephritis or pyonephrosis following.

Renal calculi are frequently overlooked—that is, the symptoms may be overlooked. It is possible, and often happens, that a patient has a large-sized calculus and may not have any particular symptoms for months or even years. An analysis of the urine should always be made. In our physical examinations we should palpate the kidney and percuss the kidney by Murphy's method. If in any case pain is elicited, the patient should have a thorough examination. By following this routine each time we see a patient for the first time we can avoid unnecessary mistakes in diagnosis in a large number of our cases that present themselves for examination which otherwise might cause embarrassment later.

*Read by title before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2, 3, 4, 1916.

The renal colic and constant processes in the kidney of chronic nephrolithiasas are the first symptoms. The renal colic is not a constant symptom. When these violent attacks come, we generally suppose they are passing a stone through the ureter. The stone is voided many times. Ordinarily these cases do not need surgical intervention.

Renal colic leaves almost as rapidly as it comes on. Pain, nausea and vomiting are often present, also always a certain amount of shock. The pain is felt in the loin, radiates toward the bladder, groin, testicle and thigh. Retraction of the testicle usually takes place, and straining of the bladder is torturing. This colic will make the bravest patients roll and scream. This class of cases is rather easy to suspect.

When the stone is fixed in the kidney, the pains are not so agonizing. There is pain on pressure, changes in the urine, and frequent urination. Practically every specimen of urine in these cases will show red blood cells. Macroscopic bleeding may be profuse, but rarely ever is. Casts, pus and crystals in the urine are of importance. In a case of chronic nephrolithiasis, that is infected, there may be a slight elevation of temperature.

The symptoms above should be noticed by any of us. The *x*-ray is, however, our most important aid in making a diagnosis of stone in the kidney.

A skiagram will in a majority of the cases give a definite conclusion. If the plates are properly developed, and a competent roentgenologist studies the plate, the diagnosis is comparatively easy.

Ashburn says we cannot be absolutley certain of stone in the kidney without they are seen in a skiagram. Next in importance is the cystoscope. The cystoscope will reveal alterations in the flow of the urine, or suppression of urine. In connection with the cystoscope, the wax-tipped ureteral catheter may be used. When the wax-tipped catheter encounters the stone, it is scratched, which will offer additional proof or confirmation of the diagnosis of stone.

A negative skiagram is of vast importance. The early diagnosis of renal calculus is important, as an undetected stone might cause an interstitial nephritis. The finding of a calculus does not necessarily mean an immediate operation, but the *x*-ray should be used frequently after the diagnosis is made to see whether the stones are increasing in size. Roentgenology is a valuable control in these cases.

In renal colic the pain may be referred to the opposite side in which the calculus actually exists. In atypical cases of appendicitis, it is necessary to be able to eliminate calculus.

As a further aid in making a diagnosis of renal stone, the wax-tipped catheter has been mentioned with the *x*-ray. The injection of colloid silver solutions, which are opaque to the Roentgen ray, is advisable and often of valuable assistance to the diagnostician. This will help eliminate hydronephrosis and pyonephrosis.

CASE 1.—Mrs. A. came to me suffering with a severe pain in right side. A diagnosis of appendicitis had been made. An *x*-ray examination revealed a stone in the pelvis of the kidney. There was absence of fever, acceleration of pulse, right rectus rigidity commensurate with amount of pain patient had, together with other diagnostic signs, which, in our mind, eliminated a diagnosis of appendicitis.

The operation for removal of the stone was made, the pelvis of the kidney drained, and patient made uninterrupted recovery.

CASE 2.—Mr. B. had suffered for a number of years with almost constant backache. Had occasional severe colicy pain. Passed blood quite frequently in the urine. Lost considerably in weight. Quite a number of good physicians had treated him for past five years, during which time he had complained from time to time of the same sypmtoms of which he was complaining when I saw him.

An *x*-ray examination revealed a very large stone. It was thought best to remove the kidney. The stone is here presented for your inspection.

There is even less sense shown in the application of ointments than in that of expectorants, if such a thing is possible.

A summer in the open is worth far more than all the serums out of Germany or drugs out of anywhere.

Saw palmetto is worth investigating as a remedy for conditions of irritable weakness of the senile bladder. Use the remedy alone.
—The Medical World.

ECLAMPSIA.*

By J. W. Melton, M. D.,
Slocum.

Of all grave complications of pregnancy, eclampsia, by reason of its sudden onset, frequency, and fatal results, is that which most exercises the mind of the obstetrician, and a brief review of recent literature upon the subject shows not only how interested the profession is in the matter, but also how far away a solution of the problem of the best management of the malady seems to be. It is also noticeable that the subject has been receiving the attention of the pathologist as well as the obstetrician and gynecologist. This, to my mind, marks a new era of progress in the right direction, for until we shall have found the true cause of eclampsia our treatment of necessity is emperical and to the pathologist and bioehemist we turn for enlightenment.

As to the etiology of eclampsia, I am frank to say I know but little, no matter how much theoretically I believe; no difference how many organs may be accused of inadequacy, there is one fact that stands out very prominent among the many, that it is always in connection with pregnancy that we find the inefficiency complained of.

As to just what changes occur in blood and bones, liver and kidneys, in the thyroid and parathyroids, during the nine months of pregnancy, some general facts are known; but as to the finer histological changes that occur in the different organs, but little is known. However, the pathologists are laboriously spelling out the changes, and in all probability we are now facing the dawn of a brighter day regarding the pathology of this dreadful malady.

THE PHYSIOLOGY OF PREGNANCY.

So little being known regarding the exact tissue changes and bioehemistry of pregnancy, certainly we should endeavor to acquaint ourselves with the physiology of pregnancy.

In order that we might understand the abnormal, it is well that we study the normal.

A great deal of time and much energy has been spent in trying to find out why one pregnant woman in 500 develops eclampsia; why not rather devote our attentions to the 499 other women who do not develop that disease? There are those who hold that the unborn infant acts prejudicially upon the mother, and that pregnancy is prejudicial parasitism against which the maternal organism is forced to develop and in immunity reactions and the like it has to be allowed that they have some evidence in support of their contentions. When a woman comes safely through her confinement it is customary to give thanks that she has been kept well and safely through nature's hour of danger; but if the above be true, it will be well to regard her as in peril during the nine months which have preceded that hour. There is another view that pregnancy is a state of harmonious symbiosis, as a condition in which the fetal life within the maternal life forms on the whole a beneficial association of vital energies. It is admitted that it is a time of stress and strain, but it is maintained that the maternal system in a great majority of cases is able to respond to all the demands made upon it, and at the end it emerges no worse, but rather better and stronger for the testing it has received. But it must be admitted that this harmonious symbolism is very easily thrown out of harmony, and if this harmonious symbolism is destroyed, the risk of eclampsia and other morbid gestational states has to be faced. The fact at issue limits itself to one question: Is physiology working at high pressure and under great strain to be accounted pathology?

The answer to this question awaits the investigation of the physiologist and biochemist.

TREATMENT OF ECLAMPSIA.

In the meantime the treatment of eclampsia calls for consideration and cannot be delayed until the state of pregnancy can be definitely fixed.

There are but few diseases that call for so prompt and persistent treatment as eclampsia, and I doubt not, when the average obstetrician looks back over the past fifteen or twenty years, he remembers more vividly the symptomatology and prognosis of this malady than any of the many and varied experiences of the past. He who has attended at the bedside of a patient in the throes of this malady, who only a few moments before had been resting placidly with no great inconvenience, whose face bore the stamp of intelligence, and whose features were tranquil and lovely, now beholds his patient convulsed in agony, features distorted, becoming almost heinous, respira-

*Read by title before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2, 3, 4, 1916.

tions intermittent and sterterous, countenance livid, and general appearance that of quick disolution; and last, but not always the least discomforting, the family, imploring his active efforts to restoration, he is not likely soon to forget, try as he may, the sad experience of that confinement.

However shocking and trying the experience, above all, the obstetrician should be self-possessed and composed, never letting his sympathies and feelings become the master of him; rather, he should endeavor to master the situation, by the application of such judicious means as to his judgment are applicable to the individual case.

Here allow me to say that I believe that the obstetrician should possess an individuality, and should apply it especially to each of his eclampsia cases; while there are many remedial agencies recommended, and no doubt with some potency, for this malady, there are a few, to my mind, rational measures that should ever be at the command of the obstetrician.

The first thing that calls for consideration is the stopping of convulsions.

This can usually be accomplished by hypodermics of morphin and chloroform inhalation; but to prevent their recurrence calls for other and varied treatment.

Believing, as I do, that the convulsions are produced by the accumulations of toxin in the body and not from the fetus in utero, I disregard immediate delivery, unless this can be accomplished rapidly and easily, as in cases of quite a deal of advancement where we can deliver with a low-forceps operation, and direct my attention to the elimination of the toxins, which may be accomplished by the administration of large doses of calomel, or oleum tiglii, washing out stomach with sodium bicarbonate solution and running into it a large dose of magnesium sulphate. Give a copious enema of castor oil and soap and water; meanwhile remember to keep down the high blood pressure by venisection or tincture of veratrum hypodermically. Also lessening the nervous irritability by enemas of bromids and chloral hydrate. Frequently we find the hot pack very serviceable, as it produces a free diaphoresis, and in a grave case of this class we should endeavor by every reasonable means at our command to eliminate by every conceivable method. But the adage that prevention is better than cure, applies in no particular any more forcibly than to eclampsia.

Unfortunately we have no statistics relative to the number of cases of eclampsia that have been stopped short of convulsion by preventative treatment.

It is possible to make a fairly accurate estimate by agreeing upon the signs and symptoms of the pre-eclamptic state, and upon the degree of severity of these which indicate impending convulsions, base our statistics; for, as is well known, not every case with swollen lower limbs, more or less headache, or severe gastric disturbances, reaches the fastidium of the disease or the convulsive stage, even without treatment.

When a pregnant woman begins to suffer from persistent headache, dimness of vision, from puffiness of skin of face and hands, from scanty urine, when albumin appears in her urine and the blood pressure begins to rise, we can safely assume that she is in the pre-eclamptic state and in imminent danger of convulsions.

Of all the symptoms and signs of convulsions, albuminuria, in my judgment, is the most reliable, and as this cannot possibly be recognized without a test for same, it is imperative that the medical man who is to attend the patient should make repeated examinations of specimens of the urine at stated intervals. The best way to accomplish this is to have a certain date for submission of the specimen and insist on the patient living up to your expectations regarding same.

Another good diagnostic sign is the blood pressure; when the pressure runs high (180) we should expect convulsions and treat our patient accordingly; therefore, it is well to make frequent examinations as to blood pressure, as with the albumin test together with the blood pressure and physical signs and symptoms, the average physician will be able to make an intelligent prognosis of his cases of pregnancy.

Knowing the importance of these signs and tests, the frequency of eclampsia, the fatality of the convulsions, both to mother and child, I would urge that the profession refuse to take a case of confinement without having been previously engaged not only to attend during labor, but to look after the health of the expectant mother during pregnancy. Further, let me urge upon the profession the fact that until we educate the laity to regard these pronormal signs as danger signals, we shall have to continue signing death certificates for eclampsia.

Honestly believing that the majority, if not all, our cases of eclampsia could be averted by proper prophylactics, and realizing the impossibility of applying these measures without a better understanding of the danger signs by the laity, too realizing how slowly we are advancing under the individual efforts of the profession, I feel it is time we were making a united effort to educate the public along this line, as well as others we are now advocating, and that either our State Board of Health or our medical societies should issue the proper propaganda on this malady and cause its distribution to the public, and after having given this matter some thought, have decided that the individual county societies, either as initiative or co-operative bodies, could do the work possibly more effectively than any other organization.

Now as to prophylaxis: The hygienic surroundings of the expectant mother should be the very best obtainable, and while her habits of life should be restricted moderately, they should not be too sedentary.

If albumin appears in urine, the patient should be placed on absolute milk diet, together with sulphate of magnesia, night and morning, and if this does not cause a diminution of the albumin, we should employ more drastic remedies, and apocynum canabinum, calomel, together with the hot pack, to produce free perspiration venisection, or tincture of veratrum to lower blood pressure and the bromids and chloral to allay nervous irritability.

With the judicious employment of these agencies, I doubt not that the convulsions of puerperal eclampsia would become a matter of history, to the great joy of the obstetrician and the relief of motherhood.

In southern California several years ago the oil escaping from a small spring formed in a depression of the earth a little pool. The lighter portions of the oil evaporated, leaving the sticky asphalt. From time to time the rains covered the surface of the pool with water; animals and birds came down to drink, sank into the asphalt and were imprisoned in this gigantic animal trap. The hungry wolves saw there before their eyes fresh animal food of every sort, from the enormous mastodon to the smallest bird. They, too, were drawn into the trap as were also the larger saber-toothed tigers which then roamed that vicinity. Today scientists are engaged in excavating the bones deposited there by indiscreet appetite.

The aim of civilization is to create inhibition, the quality which holds back and directs to useful purposes the natural appetites, preventing them from leading man into the pitfalls which beset overindulgence. Hunger is the great stimulus of action, but when it is satisfied to satiety, sodden inactivity follows. If the natural appetite is allowed to dominate, it leads to overindulgence and the unwary victim suddenly finds himself in a trap from which he cannot escape.

One of the great elements in maintaining health is the regulation of the bodily intake to meet the appetite. The man who works with his hands requires more food than the brain worker. The man who labors in the open air needs more nourishment than he who sits cooped in an office all day long. Give the sedentary worker the appetite of the day laborer, and if that appetite be uncontrolled the body will become clogged with the poisonous products of its own manufacture and physical deterioration will surely follow. It is just as bad to eat too much as it is to eat too little. To indulge the appetite to too great an extent is equally as pernicious as its constant repression. The best is to be found in an average course, neither over nor under-indulgence, neither the following of the inelastic dietary nor the promiscuous and ill-considered use of foods. Many a so-called case of dyspepsia is nothing in the world but the rebellion of an overworked stomach, the remonstrance of a body which has been stuffed to repletion. A great deal has been accomplished in the reduction of infant mortality because we are able to control what infants may eat. Adults must for themselves exercise this as self-control. If this is done there will be a decline in our adult mortality rates and an increase in health and efficiency.

THE JOURNAL
OF THE
Arkansas Medical Society

Owned and controlled by the Arkansas Medical Society and published under the direction of the Council.

DR. WILLIAM R. BATHURST, EDITOR

PUBLISHED MONTHLY. Price, $1.00 a Year in Advance. Single Copies, 25 Cents.

Entered as second-class matter, June 21, 1906, at the post-office at Little Rock, Arkansas, under Act of Congress of March 3, 1879.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Address:
The Journal of the Arkansas Medical Society,
810 State Bank Building,
Little Rock, Ark.

ADVERTISING RATES:
Upon request, a schedule of rates will be furnished.

ANONYMOUS COMMUNICATIONS.
Anonymous communications will not appear in the columns of this Journal, no matter how meritorious they may be.

Editorials.

THE MAY MEETING.

Eaeh year we begin in January to eall attention of our members to the preparations for the seientifie program for the May meeting. It is not too early. It is something of an undertaking to get up an aeeeptable program and it is very essential that applieation for plaees on the program be reeeived as soon as possible.

And let us impress on our members the fact that there is no favoritism in seleeting the members who will get on the program. The State Society is made up of the units that constitute the membership. Every member is eligible for a place and a hearing. However, there are some 1,250 members and it would be a physical impossibility to aeeept papers from all. It is equally eertain that all will not apply; but it is also true that the chances are that more will apply than can be aecepted. For that reason, those who apply early will be given first eonsideration. We want a good scientific program. We must give our members something worth their time and attention or the attendance will droop. We want to utilize the very best talent in the profession—and there is plenty of it. If you feel that you have something that will be of benefit to the eonvention, write to the Committee on Program at onee, and if your offer of a paper is aecepted, get buys at once and write it. Do not disappoint the eonvention after the programs are printed. We do not want papers too long, but to the point—the shorter the better, so the subjeet is eovered.

The committee would like also to have suggestions from members of the soeiety as to how best to make the May meeting a sueeess.

Would you like for some of the Little Roek doetors to hold a clinieal session during the convention?

Would you like to have the program eonfined exelusively to Arkansas physieians, or, as in former years, invite some outside talent?

Based on your attendanee at previous meetings, have you any other suggestions to offer to make the meeting a greater sueeess?

The Program Committee eonsists of the following: Dr. R. C. Dorr, Batesville, ehairman; Dr. C. P. Meriwether, Little Rock; Dr. Wm. R. Bathurst, Little Roek.

WHEN GREED THREATENS HEALTH.

The U. S. Publie Health Bureau at Washington has ealled attention to a menaee eonnected with the higher cost of living. The bureau sent out a warning on January 3, 1917, that to keep within their means many people will so diminish the nutritive value of their daily menu as to cause a notable inerease of pellagra. That is not at all unlikely. American industries have made more money than ever in the history of the country. In some industries wages have been advanced, but the wages of the unskilled labor and of the great army of elerks and salesmen remain the same, so that with wages the same and the eost of living greatly inereased, the table is likely to suffer. And what is most lamentable, in those homes in whieh are the most children, the eutting down of the bill of fare will be the most necessary—and lack of proper nutrition during the formative years can only result in deterioration, which, sapping the foundation, can never be reeovered. A Little Rock egg jobber, the largest in the city, is authority for the statement that, whereas in normal times the weekly consumption of eggs in Little Rock is 9,000 dozen, it drops to 3,000 dozen when prices are as high as at present—and the falling off in the sale is in the homes of the less wealthy who most need nourishing food. The high priees of feed and of beef has given double reason for the getting rid of many thou-

sands of cows, so that many country homes will be deprived of the normal supply of milk.

It is unquestionably true that the war in Europe is merely a pretext for advancing the prices of very many food articles which, not being exported, could by no possibility be affected by the war. Shipping vast quantities of flour and meats to Europe may excuse, or at least account for, the advance in prices of these essentials, but it cannot excuse or account for the increased cost of every vegetable and almost every other edible which has advanced in price. These advances are made because it is in the power of certain men and groups of men to make them, a fact shown by the government investigations and dictated by common sense. The wealth of the country is in the country's bone and sinew, since all wealth in the last analysis comes from the products of the soil. The men, or groups of men, who wax rich on thus depriving their fellow-men of the proper nourishment, and who thus threaten the health of communities, are enemies of the nation as truly as though engaged in actual conspiracy against the government. It remains to be seen how long the people and the government will stand for this rapacity which knows no satiety, no matter who suffers, how many suffer, or how much they suffer.

Abstracts.

NOSE, THROAT AND EAR INFECTIONS.

Hill Hastings, Los Angeles (Journal A. M. A., December 2, 1916), in his chairman's address before the Section on Laryngology at the late meeting of the American Medical Association, took up the subject of the care and preventive treatment of colds or diseases of the ear, nose and throat, and the responsibility of the medical profession to the public in regard to these disorders. The public is not sufficiently aware, he says, of certain preventive measures which may be summarized as follows: 1. A daily cold bath. If the cold tub bath produces too much shock, a cold sponge bath of the face, neck and shoulders may be substituted. 2. Fresh circulating air in the bedchamber. While the sleeping porch accomplishes this, the fad for outdoor sleeping may be overdone, and he especially condemns the attempt to harden children susceptible to bronchitis and laryngitis in this way. Another preventive measure against colds is the avoidance of plunges, especially during epidemics of colds, where the swimming tanks, etc., are contaminated by the nasal secretions. 4. Care in handling the nasal secretions. 5. The use of vaccines to prevent colds, though much lauded, has not proved a success, and therefore should be avoided. A cold or sore throat may be a simple affair, but its complications or consequences may be very serious. Removal of tonsils and adenoids in children is also advised, and more prompt incision of the drum membrane when middle ear abscess is formed. A number of measures that have been more or less in vogue are condemned, such as certain forms of nasal douche, blowing out the nasal secretion with too much force, and going in swimming with a cold in the head.

ITCHING.

Itching as a symptom is discussed by Philip Kilroy, Springfield, Mass. (Journal A. M. A., December 9, 1916). The nature of the sensation, he says, depends on the cerebral interpretation, and we may have itching hallucinations. The habit of scratching is a potent factor; if one scratches one's ear for a mild itching today, he may have a severe itching tomorrow. It may be a symptom of skin disease and is often the cause of the disease. Eczema and lichen simplex always are the cutaneous reactions of scratching. Kilroy denies the existence of the so-called sensory dissociation and the whole diagnostic edifice built thereon, which he claims has neither anatomic basis nor experimental proof. All the different perceptions, he holds, are due to varying stimuli of a similar nerve. Variation in wave length gives variation in sound and no further explanation is needed for the different perceptions of sight or touch or the special senses. The different causes that bring about itching accord with the theory that itching is only a variation of the sense of touch. The author who taught that itching was due to a disproportion between the pressure of the tissue fluids and the counter-pressure of the epidermis has recently given as an explanation of general pruritis the irritating effect of circulation toxins on the endothelial branches of the vascular nerves, but it is very improbable that they have any sensory fibres. The indolence of arsenobenzol intravenously, while so painful elsewhere, almost disproves it. All the toxic states that lead to rheumatism or neuritis are also causes of itching and our therapeutic measures that give relief, such as

diet, rest, eliminants, etc., also add to the proof. Probably pyramidon and sodium bromid should be put at the head of general antipruritic agents. The successful local applications are those that benumb, like heat, cold, etc. There is nothing serious or atavistic in the act of scratching. We do it because it dulls the terminals. In these remarks, he says, he has wished merely to emphasize the essential simplicity of a symptom that gave evidence of becoming abstruse.

LATE SYPHILIS.

A critical study of 120 cases of late syphilis with particular reference to early treatment is published by U. J. Wile and J. A. Elliott, Ann Arbor, Mich. (Journal A. M. A., December 23, 1916). During four years past they have seen in the neighborhood of 200 cases of gummatous or nodular ulcerated syphilis. In 120 of these cases they have definite criteria as to the amount and type of treatment which was given, the facts in regard to previous history as to the type of lesion; its situation; the incidence of trauma as a possible factor; knowledge of an infection; presence of syphilis in the consort; the length of time elapsing from the beginning of the infection, and the type and amount of treatment that had been given. Fifty-four were gummas or nodular ulcerated lesions. In twenty-nine cases the mucous membranes were involved. The bones and joints were involved in twenty-five and the viscera in twenty-two cases. History of trauma was given in thirteen cases, ten of them in or near the bony prominences, and in one case smoking was the alleged cause. Trauma was a factor in only 10 per cent of the cases and only a partial one then. It would seem that it is important as a factor only when the later manifestations concern the skeletal structures. In sixty-three cases there was a definite history of infection. The length of time before the late manifestations showed some interesting figures, ranging from four months to forty-four years; the average length of time elapsing for the whole group was ten years after infection, but over 33 per cent of the patients developed the late sequels in the fourth year, which may be considered the year during which tertiary accidents are liable to occur. A definite history of treatment with particular time of inception and its character was attainable in all the cases studied. Fifty-five had had absolutely no treatment whatever, and efficient treatment had been given in only one case out of the whole, counting as efficient, prolonged mercurial medication in any form. Comparing these data with a number of other cases observed during the same time and in which treatment had been instituted at the outset and carried through intensively, they found that 90 per cent had had no signs of recurrence and most of them are serologically cured. The conclusions reached are given as follows: "1. By far overshadowing all other causes of the appearance of late syphilitic sequelae, the lack of, or inefficiency of, treatment during the early period stands out the most important factor. 2. The inefficiency of treatment by the ingestion of pills is suggested by the fact that in those cases in which treatment was given the largest number had been treated in this fashion. 3. The tendency for late sequelae increases up to the fourth year, which represents a fastigium, after which there is a decrease in the probability. 4. That no latent untreated cases are immune is suggested by the lapse of forty-four years after infection in one of our cases. 5. Trauma probably plays a smaller role in the production of active syphilis during the period of lateney than is generally supposed. Where it occurs it is likely to influence the appearance of gummatous lesions in or around the skeletal structures. 6. Intensive treatment as accepted by modern methods (salvarsanization and thorough mercurialization during the early months) is protective in the largest percentage of cases. 7. In treated cases the occurrence of late sequelae, except for isolated and exceptional cases, must be regarded as an indictment against the method of treatment.

Personals and News Items.

The Arkansas Medical Society will meet in Little Rock, May 1, 2 and 3, 1917.

Dr. O. R. Kelly of Sheridan is taking a post-graduate course in New York City.

Dr. J. F. Curtis has moved from Lake Village to Jennie.

Dr. Bunn Harris of Jenny Lind has moved to Hartford, Ark.

Dr. and Mrs. C. V. Scott of Little Rock celebrated their silver wedding anniversary January 10, 1917.

Dr. C. S. Pettus, recently appointed superintendent of the Pulaski County Hospital, has returned from New York.

Dr. R. L. Saxon of Little Rock has returned from New Mexico, where he has been spending the Christmas holidays with his brother.

Dr. W. A. Snodgrass of Little Rock attended a meeting of the Committee on National Defense and a convention of deans of the medical schools of the United States, in Washington, D. C., January 6.

Dr. and Mrs. J. P. Sheppard of Little Rock are in Chicago. On their return Dr. Sheppard will join the firm of Drs. Runyan and Kirby, acting as general diagnostician and office supervisor.

Dr. R. F. Darnall, who recently resigned as assistant superintendent of the State Hospital for Nervous Diseases, has gone to Philadelphia for post-graduate study. On his return he will locate in Little Rock and take up the general practice of medicine, giving special attention to nervous and mental diseases.

Officers of the Faulkner County Medical Society for the year will be: President, Dr. C. H. Dickerson; vice president, Dr. W. J. West; and Dr. J. S. Westerfield, secretary. The society soon will call a public meeting to plan a county hospital.

Physicians visiting in Little Rock during the past month include: M. D. Kelly, Carthage; N. L. Barker, Harrison; J. W. John, Pine Bluff; C. A. Archer, DeQueen; F. T. Murphy, Brinkley; M. L. Norwood, Lockesburg; E. D. McKnight, Brinkley; J. B. Roe, Newark; J. L. Jones, Searcy.

Constitution and By-laws of the Arnansas Medical Society.—Sec. 9. A physician living near a county line may hold his membership in that county most convenient for him to attend, on permission of the component society in whose jurisdiction he resides.

Dr. M. B. Heyman of New York has been appointed superintendent of the State Hospital for Nervous Diseases to succeed Dr. E. P. Bledsoe. Dr. Heyman is a native of North Carolina, forty-six years old, and has been with Central Islip State Hospital, Long Island, the largest in New York, for twenty years.

At the meeting last month of the State Medical Board of the Arkansas Medical Society, at Little Rock, the license of Dr. C. W. Baldwin of Helena was revoked for "advertising special ability to treat or cure chronic or incurable diseases." Members of the board present were: Drs. J. C. Wallis of Arkadelphia, president; T. J. Stout of Brinkley, secretary; J. A. Bogart of Forrest City, W. F. Smith of Little Rock, and O. D. Ward of England.

This is the month when every member of the association should pay his medical society dues. Do not delay the matter, but do it now. Delinquency is inexcusable, and, besides, delinquency means a loss of certain privileges and advantages that go with membership in good standing in the Arkansas Medical Society. Delinquency occurs on and after February 1, but eleventh-hour payment of medical society dues does not speak well for doctors.

New advertisements will be found in this issue. The attention of our members and readers is called to them with the earnest appeal that the opportunity be utilized to cause these business firms to realize upon their investment in your publication. It is impossible to maintain a high standard if you do not exert some effort to cause advertisers to realize that this publication is a valuable medium for reaching the profession of Arkansas. Write to them today.

It was regularly moved by Dr. Frederick Peterson and seconded by Dr. Samuel W. Lambert of the Committee on Drug Addiction of the Committee on Social Hygiene of the National Committee on Prisons, that it be resolved that in the opinion of the committee, the drug heroin is of no real value in the practice of medicine, and that its place may be better taken by more efficacious agents that do not menace public welfare.

Resolved, that the committee recommend federal legislation to prevent the importation, manufacture and sale of heroin in the United States of America.

THE TRI-STATE MEDICAL SOCIETY OF ARKANSAS-LOUISIANA-TEXAS.

The Tri-State Medical Society of Arkansas-Louisiana-Texas held its thirteenth annual meeting in Texarkana on December 19 and 20, 1916, with about one hundred doctors in attendance, at which time the following officers were elected for the ensuing term: President, Dr. J. M. Bodenheimer, Shreveport, La.; vice presidents: Arkansas—Dr. T. F. Kittrell, Texarkana, Ark.; Louisiana—Dr. T. E. Wright, Monroe, La.; Texas— Dr. C. M. Rosser, Dallas, Tex.; secretary-treasurer, Dr. E. L. Beck, Texarkana, Ark.; councilors: Ark-

ansas—Dr. L. H. Lanier, Texarkana, Ark.; Louisiana—Dr. Osear Dowling, Shreveport, La.; Texas—Dr. Nettie Klein, Texarkana, Tex.

Shreveport, La., was selected as meeting place in 1917.

OUR COUNTY SECRETARIES.

(Extracts from the Address of Dr. James A. Spalding, Portland, Me.)

"It is always painful to me to see in a medical journal a paper entitled 'An Interesting Case' or 'Clinieal Cases,' because the reader has to waste his time trying to find out what those cases were. If they were properly labeled, the reader eould see at a glanee whether they were worth looking into at all. In the same way, all eases reported by a county seeretary should be plainly defined. 'A Bullet in the Orbit, with Preservation of Sight,' is plain. 'An Interesting Case,' eovering that very same bullet wound, gives no elue to the extraordinary injury, and more extraordinary salvation of sight.

"These brief suggestions may perhaps show how seeretaries ean inform physicians of aetual proeeedings of meetings, and at the same time turn down the fault-finders."

"It certainly seems to me that it would not be diffieult to enlighten the readers of a report were it to read something like this:

"A stated meeting of the county soeiety was held at.....on such a date, the number present being.....(and a list of those present once a year should be appended alphabetieally). The business earried on was so and so, the report of the censors amounted to this and that, and the following new members were elected. The society then listened to a paper on pneumonia, for example, in whieh the writer, Dr....., went into the pathology of the disease, which he fully deseribed, and then the etiology, whieh he eonsidered as due to infection invariably, and in eonclusion he described in detail the treatment which had given the best results in his praetice (and this treatment should be named in full in the report). The paper was discussed by Dr., who treated his eases with such a remedy (the dosage and frequeney to be mentioned). Dr..... suggested a more plausible causation (to be deseribed), and by Dr., who was enthusiastie over the very favorable results which he had obtained in several cases by a new method (to be described in a few lines of type). If cases were reported they should be defined, and if after-speakers brought out any points of medieal value they should be made alive by words."

"*Duties of the Secretary as defined in the County Constitution:* He shall record the minutes of the meetings and reeeive and take eare of all records and papers belonging to the soeiety, including its charter. He shall notify each member of the society of the place of meeting, and, whenever possible, give the program of the meeting. He shall keep an account, and promptly turn over to the treasurer all the funds of the soeiety which may come into his hands. He shall make and keep a list of the members of the society in good standing, noting of each his correct address, place and date of graduation, and date of the certifieate entitling him to practice medicine in this state, and in a separate list he shall note the same facts in regard to each legally qualified physieian in the county not a member of the society. He shall also send a eopy of these lists to the seeretary of the State Assoeiation, at such times as may be designated by it. In making out such lists, he shall endeavor to aecount for eaeh physieian who has moved into or out of the county during the year, stating both his present and past address. At the same time he shall transmit to the State Association his order on the treasurer for the annual dues of the society."—Journal of the Maine Medieal Society.

A TRIBUTE TO THE MEMORY OF DR. H. J. F. GARRETT OF HOPE, ARK.

By Chas. H. Cargile, M. D.,
Bentonville, Ark.

The news of the death of Dr. H. J. F. Garrett of Hope, Ark., on the 17th of last month, was unusually sad to me, by reason of an intimate and pleasant assoeiation in his early life. I first knew him as a boy when he came from his home on a farm to become a salesman in my father's store at Okolona, in this state. In this eapacity, as in everything else he undertook, he made good, winning more than friendship from all who were associated with him. Later he lived in our home as one of our family, while studying medicine prior to his entering the Missouri Medical College. During this time he greatly endeared himself to us, and we felt honored in knowing that he reciproeated our feeling.

While in school in Lexington, Ky., previous to studying medicine, he was attacked with

acute articular rheumatism, which so involved his heart that ever afterward he was handicapped in whatever he undertook. He knew his condition and foresaw what would probably, and did, come later.

He was fond of his profession, able, ambibitious, and studious. Had he not been so handicapped he would have succeeded preeminently. He felt his disappointment keenly, but rarely mentioned it except to his intimate friends. How sadly it was depicted in his last letter to me written a few weeks before his death, in which he said: "I think it will get me soon, but suppose one should not worry over a few years, as it is only a matter of a short while with all of us. If we have lived right we are better after we are gone. I am not dreading the other side. My life has not been what it should have been, but I feel that the little good I have done will overbalance the bad."

After practicing one year at Antoine and several years at Okolona, he moved to Hope, where he rapidly acquired the lea ling place in the local profession. This he had to relinquish soon and limit his practice to office and consultation work.

Successful and useful as he was as a physician, it was as a citizen and Christian worker that he accomplished most. He was publicspirited, a leader in all the activities for the moral uplift of his town and surrounding country.

The circumstances of his nomination an l election to the mayoralty last spring were strong testimonials of his good citizenship.

On hearing of his election, I wrote him, jocularly taunting him with having descended from the higher plane of medicine to politics. He replied that in no sense was he a politician, but that mainly his object was to promote whatever might be for the moral uplift of the town.

Hempstead County Medical Society and others were honorary pallbearers. It is said that his funeral was the largest that had ever been in Hope.

Thus passed away a good and tried friend, a successful physician, an honorable citizen, an upright official, and an exemplary Christion. Let us try to emulate his life.

NEW MEDICAL PROVISIONS FOR HEALTH INSURANCE.

Important advances in plans for organization of medical care under health insurance appear in the pamphlet entitled "Medical Provisions of the Tentative Draft of an Act for Health Insurance," just published by the American Association for Labor Legislation at its headquarters in New York City. These provisions, in the opinion of the Council of the Medical Society of the State of New York, "safeguard the public interest, the public health and the welfare of the medical profession."

Gains have been made by providing specifically in the new sections of the act for adequate representation of the medical point of view. The physician member of the state commission is supplemented by a State Medical Advisory Board elected by the state medical societies. This board passes upon regulations issued by the commission affecting medical benefit, and hears and reports upon disputes appealed to the commission. Medical interests also secure valuable participation in local organizations through the local medical commission, while the foresighted provision for the representation of different groups—health department, general practitioners and specialists—on the committee is assigned to maintain a just balance among the varying medical interests. This committee has the opportunity of discussing local medical regulations before they are put into operation by the directors of the local insurance fund, and also hears any cases of disagreement relating to medical benefit. If it is unable to settle the difficulty, appeal is taken to an arbitration committee composed of representatives of the physicians, of the local health insurance fund, and of an impartial chairman.

Careful study of foreign experience pointed out the desirability of separating the functions of certifying an insured person as eligible for benefit and of actually treating him, in order to avoid the embarrassing situation in Germany where a physician acts as plaintiff and defendant at the same time. Therefore, medical officers, not permitted practice under the act, alone, have authority to issue certificates of disability and only if its issuance has been recommended by the attending physician. To assure that high-grade men are appointed by the local funds, the bill provides that the Medical Advisory Board, elected by the state medical societies, shall establish the qualifications and that the local medical committee shall have power to veto undesirable appointments. This procedure avoids certain disadvantages of a civil service examination and assures that the medical officer is selected

because of the confidence placed in him by the physicians with whom he will be associated.

New and Nonofficial Remedies.

MERCURIALIZED SERUM, MULFORD.—The following dosage forms of mercurialized serum, Mulford, described in New and Nonofficial Remedies, 1916, p. 192:

MERCURIALIZED SERUM, MULFORD, No. 5-A.—Each package contains one 8 c.c. graduated sterile glass syringe with sterile needle, containing the equivalent of 0.0055 gm. (1-12 grain) mercuric chlorid.

MERCURIALIZED SERUM, MULFORD, No. 5-B.—Each package contains one 8 c.c. graduated sterile glass syringe with sterile needle, containing the equivalent of 0.011 gm. (1-6 grain) mercuric chlorid.

MERCURIALIZED SERUM, MULFORD, No. 6-A.—Each package contains ten 8 c.c. graduated sterile glass syringes with sterile needle, containing the equivalent of 0.0055 gm. (1-12 grain) mercuric chlorid.

MERCURIALIZED SERUM, MULFORD, No. 6-B.—Each package contains ten 8 c.c. graduated sterile glass syringes with sterile needle, containing the equivalent of 0.011 gm. (1-6 grain) mercuric chlorid. H. K. Mulford Company, Philadelphia, Pa. (Journal A. M. A., December 9, 1916, p. 1759).

PERTUSSIS BACTERIN, MULFORD.—A pertussis bacillus vaccine (see N. N. R., 1916, p. 321). Pertussis Bacterin, Mulford, is sold in packages of four syringes containing 50, 100, 200 and 400 million killed Bordet-Gengou bacilli. H. K. Mulford Company, Philadelphia, Pa. (Journal A. M. A., December 16, 1916, p. 1851).

Propaganda for Reform.

TOXICITY OF SALVARSAN.—From the reports of O. S. Ormsby and J. H. Mitchell, A. M. Moody and J. D. Ellis in The Journal of the A. M. A., December 9, 1916, it would appear that some of the salvarsan recently on the market has been unusually toxic (Journal A. M. A., December 9, 1916, p. 1764).

O-DO-CURE.—The A. M. A. Chemical Laboratory reports that a solution essentially similar to this "perspiration remedy" may be made thus: Salicylic acid 1 grain, boric acid 30 grains, alcohol 3 fluid drams, perfume sufficient, water to make 1 fluid ounce (Journal A. M. A., December 30, 1916, p. 2030).

LACTEOL.—This appears to be a lactic acid ferment preparation. The advertising material is of the usual extravagant character. The preparation is made in Paris and, since the bacteria lactic acid ferment preparations are short lived, may be inactive by the time it is used here (Journal A. M. A., December 23, 1916, p. 1959).

TANRET'S PELLETIERENE.—The exact composition of Tanret's Pelletierene is not known, but is believed to be similar to the pelletierine tannate of the U. S. P. This is said to be a variable mixture of the tannates of four alkaloids of pomegranate. As only two of the alkaloids have tenifuge properties the activity of the different preparations varies with the proportion of these alkaloids which are present (Journal A. M. A., December 30, 1916, p. 2030).

PLANT JUICE.—"Plant Juice" is a "patent medicine" which is said to yield an annual profit of $90,000.00 to Col. Frank A. Dillingham, of Cincinnati. The Milwaukee Health Department reports that, in addition to 20 per cent alcohol, "Plant Juice" contains aloes, licorice, with possibly a little cascara sagrada or senna. This nostrum is advertised as "beneficial" in anemic conditions, nervousness, sickness and debility, headache, backache, dyspepsia and various other ills (Journal A. M. A., December 2, 1916, p. 1685).

IRON CACODYLATE.—While manufacturers appear most ready to take advantage of the present interest in iron cacodylate by offering this in the form of ampules, etc., they have given little help to the A. M. A. Chemical Laboratory toward the establishment of standards for this arsenic compound. Manufacturers are ever ready to sell drugs of all sorts, but in view of the small demand for little used drugs, they cannot or will not safeguard the identity and purity of such drugs (Journal A. M. A., November 25, 1916, p. 1593).

THE STATUS OF ANTIPNEUMOCOCCUS SERUM.—The injection of the proper antipneumococcic serum in pneumonia caused by pneumococcus Type 1, is believed to be beneficial, but the serum treatment of pneumonia is still in the experimental stage. The pneumococci fall into various groups according to their immunologic relations and the first requisite for a rational use of the serum treatment of

pneumonia is the determination of the particular type of the pneumococcus concerned in a given case (Journal A. M. A., December 30, 1916, p. 2030).

Mercuric Benzoate.—When mercuric benzoate is dissolved in sodium chloride solution for injection purposes a complex mercuric compound is produced in which the mercury is a part of the acid radical. It is safe to assume that the therapeutic effect of a given weight of mercury as mercury benzoate in a stated volume of sodium chloride solution will be the same as that of the same weight of mercury in the form of mercuric chloride in the same volume of sodium chloride solution (Journal A. M. A., December 30, 1916, p. 2030).

Dakin's Hypochlorite Solution. — The following procedure is claimed to have superceded the previously published formulas: Stir 200 gm. chlorinated lime into 5,000 c.c. ordinary water and let stand over night. Dissolve 100 gm. anhydrous sodium carbonate and 80 gm. sodium bicarbonate in 5,000 c.c. cold water and pour this into the chlorinated lime mixture, and shake for one minute. After one hour siphon off the clear liquid and filter it through paper. A portion of this must not become red if a little dry phenolphthalein is added to it (Journal A. M. A., December 2, 1916, p. 1687).

Toxinol.—Toxinol is a "syphilis remedy" marketed by the Hawes Chemical Co., Louisville, Ky. It is a shotgun mixture characteristic of the days when syphilis was treated with haphazard mixtures of iodids, mercury and vegetable "alteratives." The Council on Pharmacy and Chemistry has examined Toxinol and the claims made for it, and reports that Toxinol is ineligible for New and Nonofficial Remedies because it is an irrational combination of drugs, marketed under a name that is nondescriptive of its composition and with unwarranted and misleading claims (Journal A. M. A., December 2, 1916, p. 1687).

Castrox.—Castrox is a castor oil emulsion claimed to contain castor oil 50 per cent, glycerin 10 per cent, with water and emulsifying agents. It was said to be prepared by a "unique three-day process with special apparatus and is more than 'just an emulsion.' It is a *mutual* emulsion, for the oil and aqueous solution have been united without 'forcing'. * * *" The Council held Castrox to be an unessential modification of an established article, marketed under a proprietary name and with claims which give a false value to a simple casor oil emulsion, and therefore not admissible to New and Nonofficial Remedies (Journal A. M. A., December 23, 1916, p. 1956).

Arsenobenzol (Philadelphia Polyclinic).—Dr. Schamberg explains that the Dermatologic Laboratory of the Philadelphia Polyclinic availed itself of the opportunity to supply their product when salvarsan was not obtainable. Having so served this purpose in the interest of humanity and the public health, the marketing of their product was discontinued when the German product became again available. The laboratory is not established for commercial purposes and could not afford to become embroiled in patent litigation which would no doubt be instituted by the owners of the salvarsan patent (Jour. A. M. A., December 9, 1916, p. 1776).

Sodium Cacodylate in Syphilis.—While Nichols has shown that sodium cacodylate is worthless as a spirocheticide, it is still being used in the treatment of syphilis, and it is the essential constituent of venarsen, a proprietary syphilis remedy. As a result of extensive clinical trials, Dr. H. N. Cole concluded that sodium cacodylate has no spirocheticidal value. At the utmost it has perhaps a slight action on the papular and nodular syphilids, but in no case is this effect to be compared with that produced by mercury and potassium iodid. In cases of syphilis with mucous patches sodium cacodylate is worse than useless (Journal A. M. A., December 30, 1916, p. 2012).

Quinine Injection.—By taking proper precautions the number of cases of abscess formation and necrosis from the injection of quinine may be greatly reduced, but the danger of their occurrence cannot be entirely eliminated. For this reason all authorities agree that the administration of quinine by injection should be confined to the most urgent cases of pernicious malaria. The two most important precautions are that the injection must be intramuscular and that the solution should be dilute—not stronger than ten per cent. The best salts are quinine dihydrochloride and quinine and urea hydrochloride (Journal A. M. A., December 30, 1916, p. 2030).

MAYR'S WONDERFUL STOMACH REMEDY.—More than a year ago the proprietor of Mayr's Wonderful Stomach Remedy pleaded guilty in the Federal Court to the charge that the claim that the nostrum was a cure for gallstones, appendicitis and all stomach, liver and intestinal diseases was false and fraudulent. Nearly a year later a placard over the store window of the Mayr establishment the following appears: "Mayr's Wonderful Stomach Remedy is the Only Known Cure for All Stomach, Liver and Intestinal Complaints. One Dose Will Prove It." The federal Food and Drugs Act should have its scope extended so that all advertising for a product shall come under the purview of the act (Journal A. M. A., December 9, 1916, p. 1774).

SULFO-SELENE-WALKER.—The New York Tribune explains that it was caught "napping" when it gave space to a discussion of Dr. C. H. Walker's cancer treatment, "Sulfo-Selene." It explains that, while there is probably no single false statement in the published interview self-sought by Dr. Walker, the impression sought to be conveyed that Sulfo-Selen will cure cancer, rests on no such foundation of evidence as to justify a reputable and responsible physician in setting it forth in the public prints. The Tribune explains that Dr. Walker's preparation has failed to obtain that recognition which would have given it a scientific status, namely, recognition by the Council on Pharmacy and Chemistry (Jour. A. M. A., December 16, 1916, p. 1864).

MORE MISBRANDED NOSTRUMS.—The following "patent medicines" have been held misbranded under the Federal Food and Drugs Act, chiefly because of false and unwarranted therapeutic claims: Mrs. Winslow's Soothing Syrup, declared to contain 5 per cent alcohol, and one-tenth grain morphine sulphate to each fluid ounce together with oil of aniseed, carraway, coriander, jalap, senna and sugar syrup. (As now marketed the preparation contains no opiate.) Johnson's Iodized Extract of Sarsaparilla, found to be a simple vegetable preparation with only an appreciable amount of potassium iodide. Matusow's Nulfey contains 51.8 per cent sodium salicylate. An alkaloid, probably berberine and emodin were present (Journal A. M. A., December 16, 1916, p. 1865).

BROMIN COMPOUND.—This preparation was submitted to the Council on Pharmacy and Chemistry with the following formula: "Iodin gr. 1, Bromin gr. $\frac{1}{4}$, Phosphorous gr. $\frac{1}{100}$, Thymol, gr. $\frac{2}{3}$, Menthol gr. $\frac{2}{3}$, Sterilized Oil fl. dr. 1." According to the promoters, Bromin-Iodin Compound is "A Powerful Anti-Tubercular Agent for Hypodermic Use in Pulmonary and Laryngeal Tuberculosis. * * *" The Council declared the preparation ineligible for New and Nonofficial Remedies because the "formula" was impossible if it is intended to indicate the composition of Bromin-Iodin Compound; and meaningless if it is intended to indicate the ingredients used in the manufacture; and also because there was no satisfactory evidence for its therapeutic efficiency (Journal A. M. A., December 23, 1916, p. 1958).

MORE MISBRANDED NOSTRUMS.—The following nostrums were found to be sold with false and fraudulent therapeutic claims: E. K. Thompson's Barosma Compound was found to be a watery-alcoholic solution containing bromid of potassium 3.85 per cent, potassium acetate 2.6 per cent, extract of buchu and sugar 18.4 per cent. It was sold under the inferential claim that it was a cure for Bright's disease, inflammation of the kidneys, etc. Sayman's Vegetable Liniment Compound, sold for the treatment of deafness, fever, ague and even sore nipples, toothache and chilblains, was found to be a hydro-alcoholic salution of camphor, chloroform, capsicum, oil sassafras, ammonia and plant extractive, and probably turpentine. Knorr's Genuine Hien Fong Essence or Green Drops was found to contain 69.72 per cent alcohol (by volume), 0.35 per cent ether (by volume), 0.28 grams matter per 100 c.c., flavored with oil of spearmint. It was said to be an excellent remedy for diseases of the stomach and bowels and many other ailments (Jour. A. M. A., December 9, 1915, p. 1774).

MORE MISBRANDED NOSTRUMS.—The following "patent medicines" were found misbranded under the Food and Drugs Act in the main because unwarranted and false therapeutic claims were made for them: Smith's Kidney Remedy, found to be a hydro-alcoholic solution containing glycerin, potassium acetate, trace of alkaloid, laxative extractive plant drugs. Hill's Syrup of Tar, Cod Liver Oil Extract and Menthol, essentially a sweetened hydro-alcoholic solution containing small amonuts of chloroform, menthol, morphine and tar; ipecac, tolu, cannabis indicia and wild cherry were indicated; cod liver oil was absant. Mag-No Brand Lini-

ment, essentially an aqueous solution of ammonia, flavored with sassafras oil and colored. Radway's Sarsaparillian, essentially a watery alcoholic solution of sugar, potassium iodid, arsenic, a trace of alkaloids and certain plant substances. Dr. Shoop's Diphtheria Remedy, consisting of sugar syrup with a very small amount of soluable chromate, glycerin and salicylic acid. Dr. Shoop's Preventics, a tablet containing a small amount of unidentified vegetable extractive matter. Hot Porus Plaster, essentially a capsicum plaster. N. H. Downs' Vegetable Balsamic Elixir, a sweetened solution of opium, ipecac, glycerin, and small amounts of calcium, potassium and iron compounds, flavored with anise. Kopp's Baby's Friend, containing 8.5 per cent alcohol and $\frac{1}{8}$ grain morphin sulphate to the fluid ounce. Prof. Hoff's Prescription, fromerly known as Hoff's Consumption Cure. Dr. Haynes' Arabian Balsam, apparently a mixture of cotton seed oil, turpentine and oil of cumin. Russia Salve, sold as a cure for conditions ranging from "cancers" to "mosquito bites," and from "swelled nose" to "ingrowing nails" (Journal A. M. A., December 13, 1916, pp. 1956-1957).

County Societies.

DREW COUNTY.

(Reported by A. S. J. Collins, Sec'y.)

The Drew County Medical Society met in Monticello, December 6. The following officers were elected for the ensuing year: President, M. B. Corrigan, Monticello; vice president, M. Y. Pope, Monticello; secretary and treasurer, A. S. J. Collins, Monticello; censors, Drs. E. Erwin and S. M. Gates.

MILLER COUNTY.

(Reported by Benjamin C. Middleton, Sec'y.)

The Miller County Medical Society met in regular session on December 7, 1916, in the State National Bank Building of Texarkana, at which time a very interesting paper was read on "Surgical Shock" by Dr. J. A. Lightfoot of Texarkana, after which the following officers were elected: Dr. K. M. Kelley of Texarkana, president; Dr. R. R. Dale of Texarkana, vice president; Dr. William Hibbetts of Texarkana, second vice president; Dr. B. C. Middleton of Texarkana, secretary and treasurer; Dr. A. G. Lee of Texarkana, censor.

The Bowie County (Texas) Medical Society, with whom we have a joint scientific program, met on December 22 and elected officers as follows: Dr. E. M. Watts of Texarkana, president; Dr. L. H. Lanier of Texarkana, first vice president; Dr. E. A. Gatling of Red Water, Tex., second vice president; Dr. J. K. Smith of Texarkana, secretary and treasurer; Dr. Nettie Klien of Texarkana, censor; Dr. S. A. Collom of Texarkana, delegate; Dr. J. N. White of Texarkana, alternate.

Dr. Preston Hunt of Texarkana read a very interesting paper on "Gunshot Wounds of the Abdomen."

Our society meets twice monthly in Texarkana. On the second Friday night under the auspices of the Miller County Medical Society, and on the fourth Friday night under the auspices of the Bowie County Medical Society, having a joint scientific program. The membership of one is largely the membership of both, as we do not regard our society as being as limited by the state line.

MISSISSIPPI COUNTY.

(Reported by Earl E. Craig, Sec'y.)

The Mississippi County Medical Society met in the courthouse at Oseeola, Tuesday night, December 12, at 8:30. The following members were present: Drs. C. M. Harwell, O. Howton, H. C. Dunavant, R. C. Prewitt of Oseeola; J. F. Sanders, A. E. Turrentine, W. E. Stevens of Blytheville; T. F. Hudson, S. A. Lowry of Luxora; Earl E. Craig and H. F. Crawford of Wilson.

Applications for membership from Drs. Wm. J. Sheddan and W. B. Harwell of Oseeola and Dr. I. F. Johnson of Blytheville were presented to the society for membership. The report being favorable, their names were enrolled and they were received into the society with a cordial welcome.

All members present paid their dues for the new year, and resolved that they would go to their work with increased courage and determination.

There was no scientific program assigned for the meeting. Only matters concerning the betterment of the organization were discussed.

The Mississippi County Medical Society is going to be one of the strongest organized body of doctors in this state, as they are together and are going to ask the public on different occasions to share their meetings and instruct them in things about which they should be concerned and to prove to them that

doctors' meetings are not for their own selfish interest, but for the interest of the people as well.

For the ensuing year the following officers were elected: Dr. J. F. Sanders, president; Dr. Wm. J. Sheddan, vice president; Dr. Earl E. Craig secretary and treasurer.

There being no further business, the society adjourned to meet at Blytheville on the second Tuesday in January, 1917.

PULASKI COUNTY.

(Reported by Geo. B. Fletcher, Sec'y.)

December 11, 1916.—Meeting in regular session with the following members present: Drs. Robinson, Kirby, Hudson, Wilkes, Fletcher, Stover, Hinkle, Snodgrass, Saxon, Dashiell, Garrison, Thompson, Davis, Dunaway, McCurry, Dooley, Gibson, Scarborough, Pate, Carmichael, Zell, Ogden, Harris, Jobe, Witt, Doyne, Day, Morgan Smith, Meriwether and Strauss. Visitors present by invitation were Hon. J. I. Trawick, Hon. W. B. Brooks and Judge Lee Miles.

Dr. McCurry reported a case of injury to the cornea by a nail, which necessitated the removal of the eye.

Hon. W. B. Brooks gave a talk on "The Workingman's Compensation Act" and the same was discussed by Mr. Miles, Mr. Trawick and Dr. Meriwether. A vote of thanks was extended by the society to Mr. Brooks.

Discussion on legislation in general was had by Mr. Miles, Mr. Trawick and Drs. Garrison, Smith and Meriwether.

Dr. J. E. Rooks was received as a member by transfer and the transfer of Dr. G. C. Wood was placed in the hands of the Credentials Committee, likewise the application of Dr. D. C. Lee and Dr. Wallace Rose.

Dr. Ogden, for the Library Committee, reported that all the Journals have been bound and returned.

The following officers for 1917 were elected: President, R. L. Saxon; vice president, C. E. Witt; secretary, Geo. B. Fletcher; treasurer, Wm. R. Bathurst.

January 8, 1917.—Our new president, R. L. Saxon, officiating, and the following members present: Drs. McCormack, Saxon, Fletcher, Meriwether, Chesnutt, McCaskill, Dooley, Anderson Watkins, Dunaway, Robinson, Rooks, Bathurst, Gibson, Pettus, Jobe, Snodgrass, Zell, Ogden, Kirby, Doyne, Day, Scarborough, Daly, May and Carmichael.

Dr. Anderson Watkins reported two very well worked out and interesting cases of entemeba hystolitica infection, which cases were discussed by Drs. Doyne, Gibson and Ogden.

The chair instructed the secretary to ask for an exchange of Journals with the different states which publish a Journal.

Dr. Bathurst moved, Dr. Snodgrass seconded, that the dates of meeting of the State Society be May 1, 2 and 3. Motion carried.

Dr. Snodgrass told of his recent trip to Washington, where he attended a meeting of the National Defense Committee.

Book Reviews.

THE CLINICS OF JOHN B. MURPHY, M. D., at Mercy Hospital, Chicago, Volume V, Number 4 (August, 1916). Octavo of 222 pages, 59 illustrations. W. B. Saunders Company, Philadelphia, 1916. Published bimonthly. Price per year: Paper, $8.00; cloth, $12.00.

Among many interesting articles in this number, the author gives a series of sixteen illustrations showing certain phases of gall-bladder surgery. (Modified from Kehr.)

PROGRESSIVE MEDICINE.—A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences. Edited by H. A. Hare, M. D., assisted by L. F. Appleman, M. D. Volume III, September, 1916. Published by Lea & Febiger, Philadelphia and New York. Price, $6.00 per annum.

This volume contains interesting and instructive articles on diseases of the thorax and its viscera, including the heart, lungs and blood vessels, dermatology and syphilis, obstetrics, and diseases of the nervous system.

THE PHYSICIAN'S VISITING LIST FOR 1917.—Folding leather back, convenient size for the pocket. Sixty-sixth year of its publication by P. Blakiston's Son & Co., 1012 Walnut Street, Philadelphia, Pa. Price, $1.25.

In addition to the blank pages for "Memoranda," "Addresses of Patients," "Addresses of Nurses," "Accounts Asked For," "Memoranda of Wants," "Obstetric Engagements," "Vaccination Engagements," "Records of Births," "Records of Deaths," "Cash Accounts," etc., we find in the front and back pages some very useful information pertaining to dose tables, weights and measures, isolation periods in infectious diseases, etc.

THE PRACTITIONER'S VISITING LIST FOR 1917.—Four styles: weekly, monthly, perpetual, sixty-patient. Pocket size, substantially bound in leather with flap, etc.; $1.25 net. Lea & Febiger, publishers, Philadelphia and New York.

The Practitioner's Visiting List for 1917 affords a simple and complete system for

keeping the records of daily practice. In addition to the ruled pages for daily calls and their notes, general memoranda, addresses, cash account, etc., it contains specially arranged spaces for data desired for permanent record such as births, deaths, etc. The value of such records is best appreciated by the physician who has been suddenly confronted by the necessity of producing such data after the lapse of years and in the absence of an orderly system for their preservation.

It is issued in four styles to meet the requirements of every practitioner: "Weekly," dated, for thirty patients; "Monthly," undated, for 120 patients per month; "Perpetual," undated, for thirty patients weekly per year, and "Sixty Patients," undated, for sixty patients weekly per year.

Syphilis.—By Loyd Thompson, Ph. B., M. D., Physician to the Syphilis Clinic, Government Free Bath House; Visiting Urologist to St. Joseph's Hospital; Consulting Pathologist to the Leo N. Levy Memorial Hospital, Hot Springs, Ark.; First Lieutenant, Medical Reserve Corps, United States Army; member of the American Urological Association and the American Association of Immunologists. Octavo, 415 pages, with seventy-seven engravings and seven colored plates. Cloth, $4.25 net. Lea & Febiger, publishers, Philadelphia and New York, 1916.

In preparing this volume for the profession it has been the aim of the author to present the subject of syphilis in as practical a manner as possible. For this reason a considerable portion of the work is devoted to diagnosis and treatment. The chapter on laboratory diagnosis is made especially full, as today the desirability, in fact the necessity of, laboratory aid is more evident for the successful treatment of syphilis than for any other disease. Matters of theoretical and historical interest, of course, are discussed, but usually only when they have some bearing upon the practical handling of the subject.

The author has drawn freely from the literature of syphilis at his command for his material, and has added his personal views and experiences. The illustrations are, to a large extent, from photographs taken by the authors of cases in his own practice.

Diagnosis and Treatment of Surgical Diseases of the Spinal Cord and Its Membranes.—By Charles A. Elsberg, M. D., F. A. C. S., Professor of Clinical Surgery at the New York University and Bellevue Hospital Medical College. Octavo of 330 pages, with 158 illustrations. W. B. Saunders Company, Philadelphia and London, 1916. Cloth, $5.00 net.

This is a volume of 321 pages with 158 illustrations. The text is very logically arranged in three parts. Part I is devoted to a consideration of the anatomy and physiology of the cord and the symptomatology of surgical spinal disease. One might make the criticism that the methods of examination and symptomatology are incomplete, but this criticism is anticipated and disarmed by the author's implied assumption that those attempting neurological surgery have an adequate working knowledge of organic neurology. The chapter on *x*-ray is particularly well illustrated and impresses one with the danger of misinterpreting frequent abnormalities of the spine which bear no causal relationship to the disease in question.

Part II is devoted to the technic of operations upon the spine, the spinal cord, nad nerve roots. The author's technic is described in detail and is profusely illustrated.

Part III deals with the treatment of the surgical disease of the spinal cord and membranes. There may be some question of the conservatism of including hematomyelia and spinal gliosis in this disease group. The author is convinced, however, that in selected cases (those with distinct level signs and spasticity in the lower extremeties) operative treatment offers more hope of improvement than the customary therapy. He is able to cite cases in his own experience which certainly justify his position.

On the whole, this is a very excellent book with a well-arranged, freely-illustrated text. It is limited in scope, as the title implies. No attempt is made to embrace the general subject of neurology, except as it is related to surgical conditions of the cord. The natural inference is the necessity of close co-operation between neurologist and neurologic surgeon. —J. I. S.

¶ *Aside from the articles of scientific value, there are several new features in this number well worth your attention.*

¶ *Also, if you haven't paid your dues you'll know why your Journal fails to appear next month.*

HEALTH NEWS.

Consider the automobile. When the car is going to stand still for more than a few minutes the driver stops the engine. By doing this he saves gasoline, oil, and above all, useless wear and tear on the machinery. If he lets the engine "run idle" he has wasted a lot of valuable material, shortened the life of his engine, and in the meantime the automobile hasn't budged an inch.

The birds build nests for the protection of their young against the weather; the foxes dig holes for security against foes; the squirrels lay by stores of nuts against the coming of winter; and dogs bury bones against the day when bones wil be scarce. These are the manifestations of a normal protective instinct arising from an experience of many, many generations. So far as is known, though, no bird ever tried to build more nests than his neighbor; no fox ever fretted because he only had one hole in which to hide; no squirrel ever died of anxiety lest he should not lay by enough nuts for two winters instead of for one; and no dog ever lost any sleep over the fact that he didn't have enough bones laid aside to provide for his declining years.

This protective instinct is also present in the human mind and when properly directed is a great source of prosperity both to the individual and the nation. In order for man to store up and lay by, to gain advancement either in honor or material things, it is necessary that he take some forethought of the morrow, but just so soon as he carries this beyond the normal point the mental process becomes an exaggerated and abnormal one. The normal protective instinct is stimulated by a normal fear of those events which are reasonably sure to happen in the future unless means are adopted against them. The moment that this fear becomes abnormal or exaggerated it overstimulates this protective instinct, and to no good purpose, because it results in worry. This worry continues long after the necessity for the normal stimulus of fear has passed, with the result that there is an impairment in mental power and a dissipation of the nervous forces. In other words, the mental engine has been "running idle" and at the same time delivering no propulsive power. In fact, worry is an abnormal state.

Not all worry is preventable, but for the most part it can be avoided. Most of our fears are never realized, and as a rule, if we meet our troubles day by day as they come, without worrying about them before they arrive, or fretting over them after they have passed, we will find that we have the strength to rise above them. Worry undermines the health to a certain extent. It really weakens the mental forces by tiring them out by doing nothing. Usually the relief from worry rests with the victim of this unhappy habit himself, but sometimes the real causes are not the ones which seem to explain the condition and we must go deep into our lives or have the assistance of those who are skilled in unraveling mental processes.

The best antidote for worry is a change of mental occupation, a getting away from the scenes which provoke worry, exercise in the open air, a good book, a pleasant recreation, or a temporary change of occupation. As a matter of mental health, every sufferer from this unfortunate condition owes it to himself to discover some simple means of getting away from this habit which is destructive to health and peace of mind.

John Philip Sousa, the most famous of our band-masters, has toured the world, receiving honors from various governments on his musical way, but *Sousa and his band* is most distinctively an American institution. His contribution is a symphony-in-brief:

"The Father Confessor of the world is not the Priest but the Physician. Faith in your doctor is the all-powerful panacea for recovery from illness. When the medical man is glorified in your eyes, fear departs from your soul. All in all the doctor is the most important factor in the progress of the world."—Medical Review of Reviews.

John Fox, Jr., the author of such immensely popular books as *The Little Shepherd of Kingdom Come,* and *The Trail of the Lonesome Pine,* has probably regretted—at times—that he did not follow the profession of Hippocrates:

"I have always said that if I had been a good physician or surgeon, I could meet death with more satisfaction than if I had followed any other calling known to man."—Medical Review of Reviews.

ANNUAL SESSION, LITTLE ROCK, MAY 1, 2, 3

THE JOURNAL OF THE Arkansas Medical Society

Owned and Published Monthly by the Arkansas Medical Society

VOLUME XIII
No. 9

LITTLE ROCK, FEBRUARY, 1917

Yearly Subscription $1.00
Single Copy 25c

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THE JOURNAL

OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIII. LITTLE ROCK, ARK., FEBRUARY, 1917 No. 9

Original Articles.

METASTATIC ARTHRITIS.*

By A. G. Lee, M. D.,
Texarkana.

This subject was assigned by the Program Committee of the Miller County Medical Society for their local meeting; and in the beginning I desire to thank the state committee for the courtesy and honor of being placed upon this program, and at the same time suppress my feelings for the county society for assigning me this subject.

This condition, metastatic arthritis, is an inflammatory condition of a joint. Metastatic indicates a secondary condition or lesion, the primary focus being at some other point. It begins as an acute condition, though the primary condition may be acute or chronic.

Whatever has been said of rheumatism in its various forms involving the joints, may be said of metastatic arthritis. Metastatic has been added to the term for the reason that it is now generally believed to be secondary. It is possible for the primary condition to be an arthritis, but that eliminates it from this subject.

Some form of micro-organism is now recognized as the cause. It is to be differentiated from such arthroses as gout and the uric acid condition, and as I am not sure but that the formation of uric acid and the presence of micro-organisms are inseparable and the necessity for differentiation is thereby lessened. Some micro-organism family is now known to be the cause of metastatic arthritis. The place of origin may be any part of the anatomy. Our attention, however, has been attracted to a few definite points by their frequency, and which, until recently, were considered as premonitory, if at all, and a watchful waiting plan of treatment instituted. These points, according to their importance, are somewhat as follows: (1) tonsils, (2) alimentary tract and its joining excretory ducts (gall bladder), bile duct, pancreatic duct, etc., (3) appendix, (4) the genito-urinary tract, (5) the naso-pharynx and its connecting sinuses.

Rheumatism has lost its identity in the nomenclature of modern essential phraseology; definite bacteriological terms are now used to signify a condition—a strepto, staphylo, pneumo, gono, spiro, or a tubercular bacteriological report would be acceptable; whereas arthritis would signify nothing. The primary condition is not always determinable and often very obscure—then the diagnostician's only refuge is rheumatism.

Dorr as early as the nineties believed arthritis due to an attenuated form of staphlococcus. Schneider produced the disease by injecting knee joints with cultures from diseased gall bladder. Very recently Dr. E. C. Rosenau of Chicago has attracted more attention than anyone else by his ingenious work along this line.

The varieties of arthritis to be differentiated bacteriologically are:

1. Tubercular.
2. Syphilitic.
3. Typhoid.
4. Gonorrheal.
5. Septic.
6. Gouty.

Rheumatic fever and arthritis, while yet clinically recognized, have bacteriologically become obsolete. The curve or marking of the mortality statistics approximate that of pyemia, puerpural fever and erysipelas (Church). When the infection becomes systemic, then it becomes rheumatic fever, and so closely resembles septic fever it is difficult to differentiate.

*Read before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2, 3, 4, 1916.

The importance of predisposing causes of arthritis, such as age, sex, heredity, nervous influences, grief, worry and habits have been modified by the bacterial findings, and their bearing is only in relation to their effect upon the "kinetic drive."

The age at which tubercular arthritis is of importance is three to ten years. Up to three years of age might be termed the milk age of a human. There is no other age in which milk is used as a food in the same proportion. This suggests a question of milk as a source of tubercular infection. Tuberculosis of any kind is an insidious disease and requires from three to ten years to produce a perceptible effect upon a human, and it is for that reason that it follows instead of occurring during that age.

1. Koch, in his contention that bovine tuberculosis was not transmissible to human, used as evidence that tuberculosis did not occur during the milk age—forgetting the insidiousness of the disease—the transmissibility has been unquestionably proven, and was the incentive establishing the dairy and milk inspection department of every efficient municipal government. (There is an acute pyemic condition of bones and joints peculiar to infancy to be differentiated from tuberculosis.) This appears to me to be associated with the crawling age, tonsilar age, or as I express it, the finger-sucking age.

2. Syphilis of joints is not usually considered metastaic, but a primary condition of the second or third stage; however, the joint manifestations are usually associated with a staphylo or strepto involvement. The secondary and tertiary involvements by the disease is nothing more than a metastaic condition of the primary lesion, the original focal lesion being a chancre.

3. Typhoid furnishes a small per cent of arthritis cases, and if as a direct cause it would be regarded as metastatic, in as much as the disease *per se* makes its abode in the alimentary tract.

4. Gonorrheal: The presence of gonococci have been found in abundance—effusions may occur and become purulent and it is usually associated with the pyogenic organisms. This condition is believed by some to be due to the pyogenic organism as a metastatic attack transformed by the absorption from the original site. Opthalmia-neonatorium has contributed a number of cases.

5. The septic form of arthritis is the class with which this title is expected to deal. It may be, and is usually, associated with all the forms. Rosenau states that the embolic origin of infection is far more common than has been believed in the past, and that certain strains of streptococci have an elective power of localization; that is, they have the power of selecting their own environment. This is very perceptible in fresh culture, but which power seems to be lost entirely in time. This is probably due to the conditions in organisms similar to habits in man and beast. This influence in the native of Florida who has wandered to Alaska inspires him in his lonely hours to long once more for the sighing of the palms and the fragrance of the orange blossoms. It was this influence that caused Howard Payne to sing "Home, Sweet Home." The longer one remains in his new environment, the more adapted to it he becomes. The original bacteria have a perceptible affinity for similar environment and would develop more readily in an exactly similar culture medium, but the reproduction of these bacteria upon a dissimilar culture medium causes a loss of affinity for similar localities. (American-born children of German-born parents care less for D'Faderland than do the parents.) The tendency of arthritis infections have been shown to have a wider range of distribution than other infections. This inspires a suggestion that arthritis is invariably metastatic, and that we must look elsewhere for its cause. Its wide range of infection would also suggest the great danger the patient is subjected to from various complications; it is also a source of annoyance to the diagnostician from the fact, as Resonau has shown, that thrombus often forms in regions other than the place of trauma, and emphasizes the importance of searching closely the buccal cavity for bad teeth, pus pockets, and the tonsils for diseased condition, and such places, to which we may add the appendix, gall bladder, the genito-urinary tract, the naso-pharynx and its sinuses, the respiratory tract, and the ears. It is a noticeable fact that tonsilitis, rheumatism, heart disease and chorea are closely related, and long before the bacterial condition was even suspicioned, the older authorities recognized some connecting relation; cultures from diseased tonsils have produced experimentally each of these maladies, and the effect that definite strains of the same organism have a predilection for special tissue has been prov-

en, and Dick and Rothstein produced chorea in dog by injection of cultures from diseased tonsils of a choreaic patient, and similar organism recovered from the central nervous system. These facts seem to me to take care of the effort of the neurologist to place rheumatism and its allied conditions within the category of neurosis, and the condition of the cord and nervous system; anterior, posterior and lateral, degenerations of the cord, as well as the central lesions that have been held under suspicion, are now recognized as conditions each due to a special strain of micro-organism. The greatest attention today is attracted to the tonsil and pus pockets about the teeth, in the buccal cavity. The reason for this is eminent. There is more scientific attention given to the buccal cavity and its accessories now than any other part of the anatomy; also a large per cent of micro-organisms finding their way of entrance through some point in the alimentary tract, the mouth and its accessories would obviously occupy first place. Food ingested, as at present prepared, is not sterile and glides over the surface and is grasped by the tonsils in the process of deglutition—the crypts are satisfactory if not an ideal culture tube, and when once the tonsil is infected it has every equipment, though crude, of a modern laboratory, and the infection is there absorbed to begin its disastrous work. Should the tonsil escape, the next most probable point would be some other location along the way with ideal conditions—some of the important conditions which make such location ideal for bacteria culture would be convenience for becoming inoculated—(ideal or near ideal), media, moisture, heat and stagnation, natural or unnatural constrictions along the pirmae-viae which tend to retard or stagnate the contents, would be probable points of infection, for the same reason that drift wood which escapes the bridge at Dennison, on the Red River, may be caught by the one at Index, Fulton or Shreveport. Beyond the tonsil-gate in the food current we have the stomach, the broadest surface for its length along the way, and obstructed at its distal point by the pyloris; but this surface is kept least still of any along the way, and the bacterial growth more interfered with by the character of secretions rendering it far from ideal. Beyond this is the gall bladder, very inaccessible, but when once infected is not a bad location for development of trouble. Next we come to the appendix, and if anything is left uncaught by the proximal points, it can scarcely escape the appendix. An open sediment bulb at the lower end of a stagnated reservoir (cecum) without a pet-cock or drain-cock, whose effort to carry on its functions in the upright attitude of man makes it an uphill business, forcing the contents along the ascending colon. (And this theory has something to do with the frequent occurrence of appendicitis in man and not in quadripeds.) It is fixed and immobilized by the meso-appendix—if it has a meso-appendix—and absence of peristalsis simulates a test tube in a modern bacteriologieal incubator.

Tonsils, especially in children, occupy first place by reason of the position as gateway to the digestive process—proximal to the influence of secretion of digestion—not having been previously immunized by anti-bodes, and their increased chances of infection by the habit of finger sucking. The tonsils, more often than all others combined, are the primary foci of infection (Mathews).

DISCUSSION.

Dr. Nettie Klein (Texarkana): I want to thank Dr. Lee for the courtesy extended me in asking me to discuss his very elaborate paper, which I enjoyed very much.

Through the progressive work of Dr. Rosenau, of whom I have the honor of being a former pupil, on the bacteriology of metastatic arthritis and arthritis in general, we have been given definite information on the etiological factors in these infections, so that we now know that there is no idiopathic arthritis any more than there is an idiopathic peritonitis. One reason why we were so tardy in recognizing the connection between primary infections, as of the tonsils, bronchi, pharynx, alveoli, gall bladder, typhoid ulcers or the urethra and arthritis, was the time that elapsed between the first infection and the metastatic infection.

For instance, the Neisserian arthritis does not occur until the eighteenth or twentieth day after primary ocular, urethral or vaginal infections, or a secondary exacerbation of same.

The influenzal infection of the joints occurs between the tenth and fourteenth day after the primary manifestations.

The furuncular infections of the staphylococcic type show metastases in the joints about the ninth to the eleventh day.

The streptococcic infection may cause arthritis within forty-eight to seventy-eight hours. The streptococci run more freely through the lymphatic channels and enter the fluid of the joints more easily. However, scarlatinal arthritis makes its appearance about the time the original symptoms disappear. Typhoid arthritis about four to eight weeks, or about the time the ulcers are healed or healing. Pneumococcic arthritis makes its appearance about the middle of the time limit, which is usually ten or sixteen days after the onset.

So, we see that, with the exception of the streptococcic infections, arthritis does not occur in the early stages of primary infection, but usually in the lytic or convalescent stage, or later. They may lie

dormant for years like the spirochete pallida, when some change in the host's resistance occurs, and they burst out with renewed energy.

In the cryptogenic arthritis, where the germ is not discoverable, we have been trying blood cultures, but haven't had very much success with them. The reason in autogenous fluid we didn't get a culture to grow so easily is because the cultures of Neisserian infection grow on a different culture medium from the streptococcus or staphylococcus or colon bacillus. Neisserian bacilli grow best on human blood, serum agar. The endothelial cells protect the germs, so that they do not enter the blood as easily as they would otherwise. There is no use in using a stock vaccine for a supposed germ before beginning a series of injections.

For instance, I was called upon once to make a vaccine on a supposed Neisserian infection in a rheumatic woman. She had a fibrocystic degeneration of the ovary, with acute appendicitis. A letter received yesterday from my teacher, Dr. Rosenau, from the Mayo Foundation for Medical Education and Research, reminds me that he has recently mentioned the occurrence of fibrocystic degeneration of the ovary was the result of a streptococcic infection in young women, which he claims is the result of tonsillitis. The frequent occurrence of fibrocystic degeneration of the ovaries, cholecystitis and arthritis are due to streptococci from distant foci, presumably from pus pockets in the mouth or somewhere from the buccal cavity.

We should remember that there is a difference between a Neisserian septicemia and a Neisserian arthritis.

Dr. E. H. Martin (Hot Springs): Dr. Lee's paper has been so excellent, and Dr. Klein's discussion so exhaustive in that line, that it leaves very little for me to say, except to follow the suggestion of the essayist and tell you to send these cases to Hot Springs. I believe that was the idea, that I must discuss it from a health-resort standpoint. Unfortunately, we find that when they come to Hot Springs, the health-resort standpoint is very much the same as the standpoint at home.

The first thing necessary to do is to find out the focus of infection. You have just heard a very long list of germs that will give a man arthritis. You have to search every place from the crown of the patient's head to the soles of his feet. Of course, we go to the likeliest place first, and examine the tonsils, then the teeth, and get the venereal history. I think about 30 per cent of these cases are gonococcic—a great many more than are suspected. Sometimes an old gonorrhea, apparently well, has left the prostate infected, and you have a gonococcic infection in the joints from that two or three years afterward. The same thing happens as to pus tubes very often.

If it is possible to find the cause and eliminate it, we feel that it is plain sailing then to the cure of the case. Sometimes it is not possible. It is then possible to make an autogenous vaccine, and we have to fall back on the stock vaccines. And, I must say that the stock vaccines have been of no service to me whatever.

Phylagogen, I think it is almost a crime to give. Some may have had good results. You can see from last night's discussion how much men may differ in their results, and if anybody has gotten results with phylagogen, I am perfectly willing for him to give it to somebody else. He could not give it to me. I have given my last dose. I don't think I ever accomplished anything at all with it, and I know I made a great many patients very sick and miserable.

When you have an acute case of articular rheumatism, to go back to the old nomenclature, and you go to the patient and find three or four joints apparently infected, and go back the next day and you find one or two of those joints are getting all right, and two or three other joints are affected, you have a toxic synovitis in certain joints without a real infection, I think you can avoid a great deal of trouble then by the use of the salicylates. I still believe in doctoring a little bit. The salicylate which I prefer is the acetic acid salicylate, commonly known as aspirin. Acetic acid has always been used to relieve pain, which every negro who has applied vinegar and brown paper can certify to. All of the coal tar derivaties, which have acetic acid as their base or one part of their formula, are pain-relievers. The acetic acid element in aspirin gives you a pain-relieving quality which is greatly enhanced by the salicylic acid element of the compound. There is no good reason why the salicylate of acetic acid should not be as efficacious as the salicylate of soda as an anti-rheumatic or anti-arthritic. So, I prefer aspirin to any of the other salicylates, and also because it is not quite so hard on the stomach. I think that patients who are given, in these early cases, fifteen to twenty grains of aspirin—that is what I mean—every four hours, if the focus of infection is not permanent, will often make very rapid recoveries, where they might drag into a chronic condition of the joints without it. I feel sure of that. Five or six grains of aspirin will not do it. And I have never seen a case of serious depression from the use of sixty to eighty grains of aspirin a day. I don't think you will find that it will be depressing. Some of these cases, in fact most of them, are likely to have heavy sweats anyhow, and you may have to use strychnin and atropin at times. But if you try to remove the focus of infection, giving it what treatment can be given it—I am speaking of the first few days—and giving the patient a purgative, because you always have to take the chance of that appendix or some other part of the body being cleaned out by purgatives—and then push the aspirin, I say you will sometimes abort a case, when otherwise you would not do so. Of course, you cannot do that if the focus of infection is permanent, like it is in a case of gonorrhea.

I think the figures that Dr. Rosenau gives for Neisserian infection are incorrect. It may be the rule, and probably is, for infection not to take place until as late as he states, but I have seen at least half a dozen cases where it took place within the first week after the urethral discharge appeared. In spite of that, I believe that the Neisserian infection seldom gives metastatic arthritis from absorption from the urethra or through the ordinary lymphatic channels. I have rarely seen a case where the prostate was not first infected. Infection of the prostate is usually essential to metastatic infection of that kind in the male, and that infection of the uterine or cervical canal is usually necessary to metastatic arthritis in the female. Unless there is abscess formation, you will seldom see metastatic arthritis in the female not following gonorrheal endometritis.

Now, I haven't said anything much about health resorts yet; but at health resorts we think as much about the other things as you do at home. We have to get rid of all sources of infection first, and the possibility to do that is the deciding factor usually of how long and protracted a siege a patient is going to have. If the patient has one or two joints very much distended, and you can Murphyize those joints in the first thirty-six hours, you will very often abort the infection in those joints. After thirty-six hours I think it is useless—I found it so, usually—to put formalin and glycerin in a joint. But, during the first thirty-six hours, while the joint is thoroughly distended and while the pain is the greatest, and when the cartilages are beginning to lose their shine and things are getting rusty in there, if you can get that fluid out quickly and put your formalin in, you may get surprising results. You will have in the next six hours a joint as large as ever, but not with infected

material; and that fluid will absorb within a few days and the joint gradually becomes normal. I have seen a patient with a knee joint as large as a cocoanut walk in a week.

The Murphy treatment of arthritis is just treating the end of the limb. It is not treating the cause.

I had a case not long ago that puzzled me greatly. We could find nothing as a source of infection in that man. He had the most terrific pains every day, in the hip, back, one knee, and wrist. I finally sent him down to Dr. Short to see if he could find anything in his nose. His nose looked healthy; the turbinates were healthy. Dr. Short used transillumination and found that he had a antrum full of pus. Of course, I might have bathed him and treated him and done everything to his joints, Murphyized him and everything else, and that man was going to stay sick and get worse until that pus was out of his antrum. Dr. Short evacuated the pus and the man was practically well in two days, and then the baths did him a great deal of good.

I don't want you to think that I don't consider that the baths do a great deal of good in many other cases; but it is very essential for the home doctor, before he sends a patient to Hot Springs, to do everything he can to find out the cause of his trouble.

Very often in married women you can't inquire about Neisserian infection, but you can secure this information through the nurse or by some other examination, and decide whether she has a Neisserian infection or not. If she has, proper treatment can be instituted. The vaccines will do no good there.

The patient that you doctors away from Hot Springs will get tired of is one who has been calling you up every night or two to come and give her a hypodermic. That patient you physicians send to Hot Springs. But don't send her until she quits having fever, because as soon as she gets there she wants to begin the baths, and, if we give her a bath while she is having fever, she is very apt to feel a great deal worse. Keep her at home until she gets through having fever in the morning, anyhow. A little fever in the afternoon does not make so much difference.

Now comes the question, What good is the baths going to do her? You all are familiar now, probably, with the fact that these baths increase metabolism; they increase cell activity all over the body, and especially in the joints that you apply the packs to. Increased metabolism is what we wanted all the time. You can remember that for years we have given certain medicines while we did not understand exactly what they did, but we knew they did something. We got results, and we call them alteratives. If there is anything that is typical of the alterative effect of deposits being picked up by increased metabolism, you can see it after a series of baths in these cases that are ready to get well. But, don't send them there until they are ready to get well, because very often we have to make them wait until ready for the baths.

I am sorry Dr. Runyan was not here. I wanted him to discuss this Murphy treatment a little more, but all I can say of it is that it is very effective if you can use it in the first thirty-six hours; but it does not remove the cause.

Dr. F. H. Clarke (El Reno, Okla): Nothing has come before this association of greater importance than this question of metastatic arthritis. I have been especially glad to hear the discussion from Rosenau, because we in the West have all come to feel that Rosenau has been the pioneer in this matter. He has blazed the way with a trail that we can all follow, and follow with a feeling of safety.

There are just two or three points that I want to speak of with reference to certain points that the speaker has made; not to add anything new, but to add emphasis to those things spoken of, especially by the essayist.

We are dealing more and more today with buccal cavity infections. On the program of our coming state meeting in Oklahoma next week there will be, perhaps, one of the most interesting papers on the entire program given by three men who have been following the work of buccal cavity infections for some six months, and who will give us at that time the results of this series of cases they have been working on.

It was my pleasure to hear Dr. Rosenau five years ago when he first began on this work, before he perfected it. For he was the first man to suggest the origin of rheumatism in the buccal cavity. He read before a medical meeting of the Association of the Southwest the results of his work to date, but he told us then that his work was not at all completed, and, while he was giving it to us as far as he had gone, he felt he was only just at the beginning of his work. Three years ago this fall I heard Rosenau in Chicago again, and had the pleasure of being in his clinic and saw one of these cases I am speaking of, and I think it is worth repeating here just in a brief way, because it brings home just the very point I am trying to make to you, that we have overlooked so much of the time these buccal cavity infections.

The case was that of an old man, seventy-two years of age. Not a joint in his body could be moved to any extent. Of course, they were not fixed, but he was in that state where he could neither dress, feed himself, nor walk. That looked like a rather hopeless condition to deal with, in a man seventy-two years of age. Dr. Billings, Dr. Rosenau and Dr. Bevan, of Chicago, exhibited that man in the clinic at the Presbyterian Hospital after about six months of treatment. They gave us the history of the case; that for three months they could do nothing; they could not find any specific organism that they could work on, or any specific location in which a focus of infection could be located. By accident it was discovered that he had a bad tooth. The bad tooth was extracted and an autogenous vaccine was made. I saw the gentleman; he could leave his wheel chair; he was able to walk, dress and feed himself, and was to leave the hospital the next day.

That is one concrete case that came to us. And if Rosenau, Billings and Bevan—whom you all know, and whom everyone of us respect very highly—could overlook those things for three months, how easy it would be for us, in our hurry—without, of course, the care that we ought to be able to give many of our cases because of a lack of laboratory facilities and special diagnostic apparatus to aid us in this work—how easy it would be for us to overlook it.

I think this is one of the most important things that will come before us.

Just a few years ago, when we visited the clinics, everyone who came in with advanced arthritis was resected. You don't hear anything about resection in Chicago except in Murphy's clinic, and he hasn't Rosenau behind him. Perhaps if he had, he would not do so much resection at the present time. I don't mean to speak lightly of him, because I am a great admirer of Dr. Murphy; but it has not been given to him to have the same opportunity of seeing such timely work as we have been able to see the other way.

There ought to be in every county in Arkansas or Oklahoma, or any one of our states, a laboratory where work of this character should be done by some man, and there is work enough in every county in each state for some one man to constitute himself—I don't like to say "specialist," because that is distasteful to a great many people—but to be so equipped that he could make a positive diagnosis. And,

when we get to that point we are going to practice medicine more rationally than we have ever before, we are going to find out things in a much more scientific way, and we are going to get rid of a great deal of the after trouble we have been having, especially along the line that has been mentioned here this morning.

Dr. L. P. Gibson (Little Rock): I want to refer to the word "rheumatism," one of the worst names that the members of the medical professiou have ever bestowed, and one of the best cloaks for ignorance that I know of. Whenever we don't know what is the matter with a patient and he has a pain anywhere, he has a "touch of rheumatism." It might be "muscular rheumatism," or "j'int rheumatism," but *rheumatism* it is. If you take words like that from the medical profession, what are we doctors going to do? Take away antikamnia and phylagogen, and some of them would be in a bad fix. I hope that I will never again hear "phylagogen" mentioned in this medical society. I am very glad when it was mentioned today, that it was mentioned only to be condemned. I think the exploiting of such frauds is a disgrace to the medical profession.

Just one word as to Hot Springs. Sam Jones in one of his sermons said, "If you do before you get religion, what you think you are going to do after you get it, you have religion already." If we do for our patients before they go to Hot Springs, what we expect to be done for them when they get there, don't send them to Hot Springs. It is unpatriotic to preach that kind of doctrine in a state that has a health resort like Hot Springs. But, as Dr. Martin says, get the source of infection. If we search long enough, I believe in most every case we can find it. We can't readily find it in a day, a week, or even a month. In one case I saw in consultation, it took two years to find it. A woman who had all the symptoms of polyarthritis to develop. We examined the nose, throat, teeth, sinuses, and every other suspicious place; finally we found a little tenderness on the right side of the uterus. She was operated on and entirely relieved.

Another case I went to a neighboring town to see; a man fifty-four years of age had an attack of "rheumatic gout." That is another good name and is really more impressive than "rheumatism." He had a high fever, was unconscious, his knee and ankle and several joints were inflamed. He was relieved of the acute symptoms and I suggested that as soon as he was able to travel, to take him to Chicago to Drs. Billings and Rosenau. On his way he stopped in Little Rock. He had a nice set of teeth, polished gold, very pretty teeth. I told him that probably he had some pus pockets in those snags, and that maybe all that they would do for him would be to take them out. He went to Chicago, and shortly afterward I got a letter from him in which he said they gave him a very thorough examination and they took out his teeth, and he felt better than he had in thirty years. There is a case in point.

What I want to impress on you is that the focus *can* be found. Don't stop until you locate it. If you haven't the facilities in your town, send them to some other place where there are men (and facilities for the work) who will search until they find it and give permanent relief. I illustrate for my patients something about these conditions, using a tree that is dying, for example; the leaves are falling off, the flowers or fruit decaying, or other evidences of disease are present. We may water it, prune the visible decaying parts, but it keeps getting worse; at last a look at the roots explains the condition. We have found the source of infection. And it is the same with the human body. There *is* a focus, and if we look long enough we can find it, and, until we do that, we ought not treat it by another name, however concealing it may be for our ignorance or inefficiency.

Dr. C. P. Meriwether (Little Rock): Just one point I would like to bring out. I understand Dr. Klein to say the Neisserian infection of arthritis did not occur under eighteen days.

Dr. Klein: Fourteen to twenty-two days.

Dr. Meriwether: About a year ago. I was called by a colleague of mine to see a young boy eighteen years old, who developed a urethral discharge six days after having had sexual intercourse. Forty-eight hours after the discharge first appeared, he had an involvement of the right ankle and left knee, the right elbow and both testicles. I saw him about seventy hours after the joint involvement began. At that time he had a temperature of 104½ degrees, with a myocardial involvement. The doctor who had him in charge had given him three injections of stock vaccines to the amount of about 300 m. I don't know whether the excessive temperature was due to reaction as the result of the Neisserian vaccine, or to the intense infection. At any rate, he received no benefit from the stock vaccine. It looked as if he was going to die in spite of everything we could do; but we succeeded in growing an autogenous vaccine and administered it in about forty-eight hours. The first injection which we gave him was 500 m. of the autogenous vaccine. His temperature went up to 105½ degrees after this injection. But in twenty-four hours his temperature was 100 degrees; his pulse had gone down from 150 or 160 degrees to about 120 degrees. He made an uninterrupted recovery. I have examined his heart several times since, and I don't think there is any involvement of an organic nature. We gave him another 500 m. twenty-four hours after the first.

Dr. Martin: Did you have a reaction?

Dr. Meriwether: We had no reaction from the second injection at all. That involvement came on within about eight days of the time that he was exposed to the infection.

Dr. T. M. Fly (Little Rock): He may have had an exposure before that.

Dr. Meriwether: We were unable to find out.

Dr. Klein: Possibly that was an exacerbation from an older case, and, as each case is a law unto itself, it might have been an exception. I saw a case not long ago, just about a year ago, of a young man treated for a Neisserian infection. A specimen of his urine was brought down to my laboratory for some purpose, and it looked so suspicious that I centrifuged it and examined it for tubercule bacilli, and they were very abundant in the urine. There were no gonococci. The young man a few months later died from a tubercular infection of the kidney.

Dr. Lee (closing the discussion): I want to thank the doctors for their liberal discussion of this paper. I have enjoyed that a great deal.

At least fifteen years ago I remember several cases, old, chronic cases, coming to my office for treatment. I would look into their mouths and find bad teeth, filthy mouths, loose teeth, pus around the teeth. I told them then (fifteen years ago)—I didn't then know why I told them—"You go to a dentist and get treated for your teeth first, and then come back to me, and if you need me I will do something for you." I knew they had bad teeth, and knew that that was the first step in the process of digestion, and it just suggested itself to me that if the first step in digestion was bad, the other steps could not be perfect. I never thought of the bacteriological side of it.

As Dr. Martin stated, the prostate gland must necessarily be involved to get a metastatic involvement; that is necessarily true in degree only. That is a glandular structure; and you probably would come nearer getting a metastatic involvement from a glandular focus than you would from a draining

urethral surface. The urethral surface is drained frequently during the day and washed off. If the urine is sterile, it is almost rendered surgically sterile. But the glandular structure (prostate) is not drained so frequently, and, for that reason, you are more apt to get a metastatic involvement from the gland than you are from the urethra. That same principle applies in the tonsil infections from other bacteria.

As for the recurrences, according to Dr. Rosenau, of fourteen to twenty-two days, that has been pretty well covered; but, as Dr. Klein suggested, that might have been a second attack. But I believe Dr. Meriwether denies that, and says, so far as he could ascertain in this case, it was a primary attack. He didn't state that the joint involvement was proven to be a Neisserian infection. It might have been a streptometastatic built upon a primary Neisserian.

As I stated in the paper, someone has denied that the metastatic condition in gonorrheal arthritis is due to a Neisserian infection, but after an accompanying streptococcic or staphylococcic involvement. That might have been the case. Some have denied the possibility of that, that it is a streptococcic involvement carried from the urethra or the prostate gland, where strepto and other bacteria are more or less always found. That might be the case. It might be that in your case he was carrying pus pockets in his tonsils or somewhere else, infection somewhere else, and then your Neisserian infection became the "straw that broke the camel's back."

Bacteria are subject to the laws of gravitation. The atmosphere in this room today is stirred up and full of bacteria; but tomorrow, after we are gone, they will settle down and they will be on the floor principally, not altogether. The more you stir the atmosphere, the more they get into the atmosphere by adhering to the dust; but, when the atmosphere is quiet, then they are on the floor, and the baby crawling around on the floor rubs his hands on the floor and then sucks his finger afterward and gets an infection of the tonsils. As for the skin, I have stated in the paper that the skin is not an ideal field for cultures, comparatively speaking. It will in no way compare with the crypts of the tonsils, which I have compared to the test tubes in the modern bacteriological laboratory. The skin is not to be compared with that at all as a source of infection.

And, again, it is necessary for some of the bacteria to be incubated. For that reason, the skin is not an equal source of infection with the tonsils, appendix or gall bladder. I want to thank you gentlemen again.

DO YOU KNOW THAT

Efficiency decreases as fatigue increases?

The full pay envelope is the great enemy of tuberculosis?

A reliable disinfectant which may be made for 50 cents per gallon has been devised by the U. S. Public Health Service?

The maintenance of health is the first duty of the patriotic American?

Exercise in the open air cures and prevents many ills?

Typhoid fever is contracted by swallowing sewage?

Unpasteurized milk kills many babies?

EXPERIENCES IN CATARACT EXTRACTION.*

By H. Moulton, M. D., F. A. C. S.,
Fort Smith.

So many reports based on large numbers of cases of cataract extraction have been published in recent years, that it is with much hesitancy that I present my more meager experience. Yet, when I recall that such a distinguished operator as Dr. D. B. St. John Roosa, after twenty-six years of operating, reported in 1891 all of the cases he had operated upon up to that time as only 206, I do not feel bashful. He had had the advantage of a large clinic in the most populous center in the country. Then, in his day there were probably no more operators in the State of New York than there are now in Arkansas.

In these days no one operator can hope to have so large a number of cases as when there were fewer operators. As it is necessary for us smaller operators to continue to operate, it is just as necessary that we discuss our cases together and compare our results as it is to learn the experiences of the older, larger operators.

Today there are no men in America who do as many operations as did Knapp or Chisholm, whose cases averaged for a time about one hundred a year for each.

In Europe few surpass this record.

Major Smith of India, who operates on three trousand a year, is an almost incredible phenomenon.

Such a man as Dr. Casey Wood does not claim twenty-five a year.

My experience extending over twenty-six years, the same period of time which Dr. Roosa's report covered, embraces one hundred cases, or perhaps a few more, for, unfortunately, I have lost the records of a few. But, though the number is not so large, the experience is as varied as any.

I have operated in all kinds of ways, in all kinds of places, on all kinds of cases, and I may add with all kinds of results. Yet, in this series I have had but six total failures, four of them, I regret to say, from suppuration, and two from detachment. One of the latter developed only some months after the operation when all seemed well. The other immediately, following loss of vitreous, but

*Read before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2, 3, 4, 1916.

with smooth healing of the wound. Of the cases of suppuration, two were in cases operated on in unsanitary homes with the worst of surroundings. One occurred in a man of seventy-five years who had an uncontrollable convulsive tic, and on whom I operated under protest.

Nowadays operating in modern hospitals, I no longer dread the possibility of suppuration as much as in my earlier years, yet it is a danger ever present. I think aside from the ordinary aseptic precautions, no one thing is so important in avoiding infection as the use of dry instruments and dry hands. A few drops, or even one drop, of water may wash septic material from the operator's hand or the patient's eyelid or conjunctiva into the wound.

In my first years of operating I employed the combined extraction with Graefe's modified linear section exclusively. Then came the simple extraction which I took up with avidity and pleasure, employing it in the great majority of cases. But of late years I have swung back with other operators to prefer the combined extraction, doing the simple only in a selected minority.

I have complete records of thirty-six cases of simple extraction and fifty-eight cases of extraction with iridectomy. A comparison of the results is rather in favor of the simple, both as concerns visual acuity and as concerns complications of healing, although one case of prolapsed iris I had, following a simple extraction, gave me more annoyance than any other case I ever had, excepting the suppurative cases.

Yet, in estimating results in the two classes of cases, we must remember that the complicated and hard cases are always reserved for the combined method and the better class only operated by the simple.

Of my simple extractions, only one case was a failure—4 per cent. Ten cases, or 40 per cent, had vision of from 20-20 to 20-40; fifteen from 20-50 to 20-100; one, 20-200.

Of my combined operations there were five failures, or 7 per cent. Twenty-one cases, or 30 per cent, had vision of from 20-20 to 20-40; twenty-three cases 20-50 to 20-100; the rest 20-150 to 20-200. Success in all cases, 93.3 per cent; failures, 6.6 per cent.

In the simple cases were two with prolapsed iris. In the combined cases, also two. In one of each class the prolapse was excised.

Only in the combined cases was there prolapse of vitreous, which occurred in two cases.

I have not done the secondary operation of discission as often as I would if the patients would permit. Being careful to make a large crucial incision of the anterior capsule, the result usually is good or the patient at least satisfied. I seldom use the capsule forceps, always being a little afraid of dislocating the lens. I have done the secondary operation in only ten cases.

I have irrigated the anterior chamber in only four or five cases. In one case in which I used boracic solution there developed a permanent nebulosity of the cornea, with vision of 20-100, while I obtained in the other eye of the same patient, without irrigation, vision of 20-40. The cataract of the first eye was immature; that of the other operated on a year later was mature. My rule now is, if I employ irrigation, to use only normal salt solution.

There were nine cases of extraction in the capsule, but this was not premeditated in at least three of them. In the others the cataracts were shrunken and membranous.

Major Smith's operation has not been tried for two reasons: First, the small operator should not try it; second, the majority of those who have observed it are not agreed that it is a good operation for the Caucasian eye. If it has advantages in cases of immature cataracts, that is offset by the fact that in such cases, with irrigation if necessary, we generally get good results any way. If a small amount of cortex remains, it is not so greatly to be feared after all. It is a matter of frequent observation that cases of extraction, whether of mature or immature cataracts, having vision of, say, 20-100 two weeks after operation, will return in two months with vision of 20-50 or 20-30, or better, after absorption of cortex.

In all I have operated on twelve cases of immature cataract. Only one was under sixty years of age. Three were eighty or past, six had vision of 20-20 to 20-30, three 20-50, and one 20-200. The other was one of the unfortunate suppurations previously mentioned.

I have not found age a hindrance to operative success if health is otherwise good. Four cases have been over eighty years of age and did well.

It has happened that I have had to operate in nine cases in which the eye I operated on was the patient's only eye, the other having been enucleated or destroyed by disease. In all of these cases good results were fortu-

nately obtained, although some were complicated by disease existing previously in the eye.

One case was in a man sixty-four years of age. Left eye had been blinded by corneal ulceration three months. Right eye, blind many years, contained a ripe senile cataract, mobile pupil, fair perception and projection. Recovery after combined extraction was uneventful, yet a large central coloboma of the choroid was discovered extending from the papilla nearly to the macula. In spite of this, vision was 15-100. Another was in the case of a man aged forty-eight years, whose only good eye I enucleated because of a mine accident. The remaining eye had been blind many years. It contained a Morgagnian cataract. The iris was tremulous and the nucleus of the lens could be seen floating about in the milky cortex. Perception and projection fair. After capsulotomy and the escape of the fluid cortex, the nucleus had to be removed with a scoop. No vitreous was lost. After recovery, which occupied three weeks, the vitreous was seen to be full of fine opacities. Vision 20-70. The man went back to work in the mines. It is mostly of remark in this case that the worst complication was that the man was a Slav who could not speak a word of English or German.

I have operated with good results on two cases complicated with entropion. I simply pulled all the scratching lashes because the patients would not remain long enough for a lid operation to precede the cataract extraction. One had resulting vision of 20-30, the other 20-70.

In another category, a very interesting case was that of a woman forty-four years old, blind since childhood. She had hypermature shrunken cataracts which were both completely extracted, capsule and all. The chief interest lay in the fact that as she had never learned the visual form of objects, she had this to learn at a time of life much later than nature designed she should. She learned to see very slowly. At first we feared she could not see at all. Retinal images meant nothing to her. By and by, however, she could count fingers across the room. This was some weeks after operation. Gradually then she began to distinguish different objects by sight and apply the names she used when formerly she had been obliged to identify them only by the sense of touch. After several months she had learned fully to use her eyes and had vision of 20-40 in either eye. The tardy assumption of the function of vision after operation was not due to any physical defect in the eyes, because in ten days after the operation the media were all clear, fundus normal, and the eyes free from irritation.

I wish here to mention another very unique case. A man seventy-five years old came October 18, 1913, with mature cataract of the left eye and incipient of the right. His left eye was operated on three days later by the combined method. Operation and recovery smooth. Discharged after twenty-one days. December 9, vision 20-150. The pupil was clear, except for a slight web due to wrinkled posterior capsule. A deep opacity could be made out in the vitreous, but not identified. February 2 he returned with anterior chamber full of blood. Given atropin and dionin locally, mercury and iodids internally. March 9, blood absorbed. A yellowish-white globular tumor about 3 m.m. in diameter lay in the lower angle of the anterior chamber. It resembled a cyst, but in another month this had disappeared. Vitreous cloudy, no fundus, V. L. P. After this the eye remained quiet. About the time of the hemorrhage into the anterior chamber, or February 1, the patient began to develop symptoms of pellagra, and died of this disease in June. His wife had previously died of the same disease.

I do not believe there is another case on record of pellagra complicating cataract after operation.

Before closing, I wish to add my testimony to the value of the conjunctival flap. In late years I always make use of it as follows, though the method is not original with me: The knife, in making the incision, is kept exactly in the limbus from puncture and counter-puncture to the summit. As it cuts through the last layers of the cornea the edge is turned backward and carried up under the conjunctiva for one-fourth of an inch or more, making a rather broad conjunctival flap.

DISCUSSION.

Dr. F. Vinsonhaler (Little Rock): I especially enjoy these occasions, and a paper like this. I like to see the gentlemen who are interested in abdominal work, in gall bladder and brain surgery, sit and listen to a paper of this kind. I think it is coming to them once in a while to have to do that. We eye men have a sit quietly by and listen to learned discussions upon the subject of stomach ulcers, *x*-ray diagnoses, and questions of that kind. I think it is only fair that the tide be turned once in a while, and these general surgeons have to listen to us technical gentlemen speak about questions in which they are not vitally interested, perhaps.

Dr. Moultou's paper is especially interesting because it embraces the experiences of an operator who has been at it steadily for about twenty-six years. Operative procedures have changed, of course, in that time, and the doctor has changed along with the methods. As I say, au experience giveu in a paper of this kind is very valuable. It contains a great many interesting points.

I was especially interested in what the doctor had to say in reference to the question now coucerning us about the Major Smith operatiou. The most ambitious ophthalmologists are beginning now to extract the lens as a whole—to squeeze it out, so to speak, so that secondary operations are not necessary. In order to accomplish that in an operative way, a great deal of technical skill is necessary along with traiued assistants and a great deal of experience. Some of our operators have made a trip to Iudia, many thousands of miles away, for the purpose of seeing Major Smith at work. As Dr. Moulton has told you, he does three thousand cataract operations a year, and has done thirty thousand all told, I believe. It is impossible, of course, for anyone to do anything of that kind iu this country, and it is impossible for any one operator to acquire the skill aud dexterity that Major Smith possesses. So that a paper of this kiud bringing up poiuts for discussion and discussions of this kind are especially interesting.

There is one point that the doctor did not speak of—at least, I don't recall that he did—and that is that in each of these cases, especially where the age of the individual is advanced, the blood pressure should be taken. Some of us who have operated on cataract cases at advanced age, or in those who had high blood pressure, have been very much mortified after the operation to find severe hemorrhage whieh interfered seriously with the result. So, I have in all of those cases a systematie taking of the blood pressure which should be resorted to in order to avoid that very complication which is very mortifying and distressing to the ophthalmic surgeon.

The old question of infection comes up, and the question of asepsis. The question of asepsis has been as brilliant and as fruitful in its results in ophthalmic surgery as it has in abdominal. It has almost relegated infection to the past, though occasionally we do have in very unexpected cases sometimes infection occurring. It is very gratifying to know that this has happened to Dr. Moulton iu such a small percentage of cases. Those of us who have been obliged to operate in clinics and under unfavorable circumstances unfortuuately cannot boast of such a small percentage; our bad results are not so few, I am sorry to say. But, with improved facilities for operating, especially in a clinical way, we are able to cut down the percentage from year to year.

In the Department of Ophthalmology of the Medical College of the University of Arkansas, we have completed this year with ten cataract extractions, and all of them without any infection whatever. Last year I recorded a similar number, and from year to year we have about the same number; so that we have an opportunity to see all sorts of cases that come to us from different parts of the state.

In the after-treatment we are sometimes embarrassed in another way. These old people, coming to us from their homes, comiug to the college hospital and under uuusual conditions, sometimes have delirious attacks, or attacks of aeute insanity. One patient in the hospital, after a cataract operation several years ago, on the third day developed aeute mania, and we were obliged to put him in a straight jacket. Fortunately, he got well without any trouble, and with a good eye. Another patient, an elderly man, was deteeted in the act of trying to get out of the window. He had gotten out of the bed and was eseaping through a window, in a delirious condition. Another man, who was a lumberman, a large, muscular fellow, who had a traumatic cataract caused by the eye being injured from a particle of steel, it became uecessary to do an extractiou in his case, and the cataract was extracted, and on the fourth day he became delirious. Those cases are always very trying and troublesome. They are by no means unusual complications, and especially in elderly persous. I meution this in diseussing Dr. Moulton's paper, because he did not mention it to any great extent.

I regret that time is limited, aud we cannot discuss this from a wider poiut of view. I can only say that I enjoyed the doctor's paper. It is very useful and instructive, and I hope the abdominal surgeous enjoyed it as much as I did.

Dr. J. W. Scales (Pine Bluff): I have been exceedingly interested in this paper. I uotice there is a difference between a specialist and a doctor. When a doctor is called on and expected to talk, he is often absent, but the specialist is always on hand aud with a smile. Now, in regard to Dr. Moulton's paper, I have been exceedingly interested in it.

I was in hopes that he would have made mentiou of one thing, and that is the manner iu which he operates; whether he uses a speculum or whether he allows a competent assistant to use a lid-retractor. It is my universal practice to use a lid-retractor, if I can depend upon my assistant. I think we often escape the mortification of having some of the vitreous lost by using the lid-retractor. My exeprience in cataract operations is not sufficiently large—though I have not probably kept an accurate account—but I am sure I haven't operated on over six huudred cases in my life; an average of uiueteen or twenty annually for thirty years. I may have exceeded that, or it may not be that much. But, at least, my experience is not sufficient for others to draw an accurate conclusion as to whether it is best for him to use the lid-retractor or the speculum.

I have been impressed in late years with the importance of paying attention to the blood pressure, as Dr. Vinsonhaler mentioned. I am in the habit of putting my patients exclusively on a fruit diet, vegetables or milk. Then, I do not allow my patient to remain long flat of his back. I think I avoid the nervous condition that the doctor spoke of. I have never seen it in cases where they were allowed to sit up when they like. I have never seen any bad results from allowing my patient to sit up whenever he feels disposed.

I think that the blood pressure has something to do with the amount of vision after a cataract has been removed and the patient has been sent home. If a record is taken for two or three months afterward. It certainly depends to some extent upon the manner we allow our patients to live during these two or three months. If vision is about 15-20, or, say 10-20 probably is the average, if this patient is allowed to return home and resort to such diet as he is accustomed to, after six months your test of patient's vision is not as good as it was when he was dismissed. That has been my experience. But with close attention to the diet, a liquid diet, vegetable diet or fruit diet, this has never occurred in my practice.

Now, I have never attempted the Smith operation but twice. Just recently—last week, in fact—with a very competent colleague of mine, we did the Smith operation. There was not a particle of vitreous lost; but during the four or five days there was a continual oozing of the serous fluid, and I have not yet the courage to raise the bandage to see just exactly what his vision is. I am afraid to risk it. I will wait a day or two longer, at least. I have resolved, however, not to do the Smith operation any more. I think it should be done only by those who have a vast lot of experience.

It seems to me that there is a hereditary tendency for cataracts to form. I don't say it is true in all cases, but where one of a family has been operated on, in the generation following there is another. I have had this experience in my practice: with a family of negroes, eleven children, every last one of them I have operated on for cataract. Dr. Calhoun, of Atlanta, Ga., operated on one eye of the mother just after the war, and I have since operated on the other eye of the mother of these children.

Dr. Crittenden Joyes (Fort Worth, Tex.): I was very much interested in the paper. I had hoped that Dr. Moulton would touch a little more on the question of loss of vitreous, and what his observation of the effect was. In my early teaching I was taught that it was almost fatal or more or less fatal to the vision following the operation. I assisted Dr. Roosa in about thirty operations, and he spilled the vitreous in a great majority of those thirty cases. We expected vision would show up mighty bad afterward, but in refracting them we got just as good vision on an average as in the patients who did not lose vitreous. After coming home to practice, I found out that the result was the same; not much loss of vision to start with, but, after the contraction of the vitreous body, later on, there was a very rapid deterioration of the sight.

I would like to know what his experience is in regard to vitreous loss. And I would like to state also that I believe there is a tendency on the part of the operator to do a secondary operation too soon. This tendency is perhaps increased by the impatience of the patient. I think the secondary operation should usually be deferred longer than it is, for I frequently find by waiting that the vision improves so much that the operation is not necessary.

Dr. W. A. Snodgrass (Little Rock): I don't like to but in on these ophthalmologists, but I would like to know what degree of blood pressure would influence them in refusing to do a cataract operation. Not that I expect to do a cataract operation; but I want to know for another reason, whether or not a man should be subjected to blindness because he has a high blood pressure.

Dr. Moulton (closing): I enjoyed what the doctors said about the blood pressure. In regard to Dr. Snodgrass' comment, I will say this: It is important to know the blood pressure before doing a cataract extraction, for the reason that you would be more apt to get an intraocular hemorrhage, an expulsory hemorrhage from the choroid, and loss of the eye, with a high blood pressure, than without it. You should not deny the patient the chance of seeing because he has high blood pressure, but you should take some means to reduce his high blood pressure previous to the operation and make the operation safer. I think that is the value of determining the blood pressure, and the only value. It also helps us in making a prognosis.

Dr. Scales asked about the manner of operating. It would require quite a lengthy paper for one to describe completely the technic of cataract extraction from beginning to end, so I refrained from anything more than to allude to one or two things that I did in my operation. But, he specially asked about whether a speculum was used. I use the speculum for making the sections when iridectomy is done. The other steps are completed by myself and assistant in holding the lids away from the eyeball with the fingers or with a hook, as the case may seem to demand. I haven't tried to follow any set rule. I think the most important thing in avoiding accidents is, not whether you use a speculum or not, but whether you get control of your patient. Get his mind under the control of your mind. No matter who he is, or what he is, make him understand that he is just to do exactly as you want him to do and when you want him, and not have any thought or volition himself. Try to hypnotize him; get him thoroughly under your control, and you can generally avoid those accidents that we all so dread in operating.

I always make the patient, previous to beginning the operation—generally the day before, or the morning before—go through with all the movements that I want him to go through with, and just preceding the operation I make him do it again, and I don't let him talk. I have never had any of those expulsive hemorrhages coming from high blood pressure or other causes that we are powerless to do anything for.

As to the loss of vitreous, I expect I have probably been pretty fortunate in that respect. I haven't had many cases in which there has been vitreous lost in any amount. I cannot recall but five or six. Now, in two of the cases—and I think it is generally so, if they are followed up, where there is any amount of vitreous lost, where there is, say, one-fourth of the vitreous lost—in two of those cases I recall now the vision afterward was lost, although for a month or so after the operation there was fair vision, 20-100 or something like that. I believe that in a majority of such cases vision afterward is destroyed or deteriorates from probable detachment of the retina. One case I recall in which that happened. The second eye was operated upon without loss of vitreous, with good results, about a year later.

Another thing, when talking about technic, is that some operators lose sight of the necessity of controlling the lower lid. It does not make much difference how you handle the upper lid, so that you do not allow the edge of the upper lid to touch the wound; but, so often I have seen the lower lid released in taking out the speculum or in removing the finger before the upper lid was released. If you do that, just the minute you release the lower lid, most patients will begin to sneeze, and if they do, the wound is not protected by the upper lid and things are all off. Don't let loose of that lower lid until you have entirely released the upper lid and it is down over the wound. There is many a case of loss of vitreous due to failure to observe that little point.

PERITONITIS.*

By Chas. S. Holt, M. D.,
Fort Smith.

The peritoneum is an enormous lymph-sac approximately 17,500 square inches, which is about equal to that of the skin. Its fields, fossa and convolutions have important clinical bearings. The peritoneal absorbents are represented by lymphatics in the structure of the peritoneum. These lymph-channels are large and numerous in the neighborhood of the diaphragm, with comparatively large openings, or stomata. In the intestinal area the lymph-trunks and stomata are less numerous, while in the pelvic area the larger lymph-channels and stomata are absent.

Whenever the endothelial covering is permanently destroyed at any point, granulation tissue springs up and attaches itself to abja-

*Read by title before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2, 3, 4, 1916.

cent structures, forming permanent adhesions which interfere with that free mobility so essential to the functions of the alimentary tract. The peritoneum, however, has the power of forming adhesions which are of a temporary nature and are in the highest degree important and protective. This is accomplished by its property of exudation, which with its converse absorption are the special properties of the peritoneum that demand close study and appreciation in order to enable us to formulate a rational therapy for the inflamed membrane.

Inflammation of the peritoneum is exclusively of a septic origin and may be due to direct infection or to indirect infection from the presence of the toxins which invade the peritoneum through the circulation. Inflammation of the peritoneum in the daphragmatic area, other things being equal, is far more dangerous than that in the intestinal area, on account of the presence of the large absorbent trunks and the slowness with which these are sealed by infection and thrombo-lyphangitis. The next most dangerous area is the intestinal area, where the lymph-channels, though neither so large nor so numerous as in the region of the diaphragm, are still sufficient in size to permit absorption of septic material and its rapid dissemination in the system at large. In the pelvis the peritoneum is rich in capillary lymphatics, but the larger lymph-channels and stomata are absent (Byron Robinson), hence infection and inflammation of the lymphatics of the pelvic peritoneum quickly occlude the capillary lymphatics and absorption through these prevented, the septic process remaining more distinctly localized. The peritoneum in the intestinal area, on the other hand, with its larger and less easily occluded lymph-channels, when inflamed, furnishes septic products which are quickly fed to the system at large, with the effect of producing death in many instances. A like result follows infection and inflammation of the diaphragmatic area, only with still more deadly rapidity.

The surgeon must usually do his work in more or less ignorance of the important factors of the type and pathogenicity of the organisms which are responsible for the peritonitis which he sees. He must, however, derive some idea of all these matters from the source of the infection, the extent and degree of the irritation, the character of the exudate, and the systemic reaction. His conclusions will properly influence him in the extent of the surgery which would be carried out and the type of drainage necessary. Since we are never certain, in dealing with peritonitis, just how virulent it may be or how great its capacity to spread and become generalized, it is important to favor localization and plastic isolation at its point of origin by every means in our power. Naturally, the best means of preventing diffusion of infection when it can be done, is the immediate removal or repair of the source of the infection. This is the philosophy of the early operation in appendicitis and perforations of the bowel, the application of which has met with such brilliant success.

All patients who are in danger must be operated on early in order to save the greatest number. Statistics might be cited indefinitely to bear this out. No man can at all times read the living pathology without first having opened the abdomen.

As to the operation itself, it often requires more judgment to decide when not to than when to. It is at this point that physicians and surgeons should meet. The prevalent practice of calling the surgeon when it is decided that operation should be performed, has many disadvantages. It causes delay in cases that should be operated on promptly, and, on the other hand, we have some embarrassing experiences dodging operations that physicians had concluded to be necessary and so informed the patient, which our experience had taught us were useless or worse. More surgical consultations without the necessary inference of operation would improve many of our results.

Another important rule when operating in the presence of acute peritonitis is to do the least consistent and in the shortest time compatible with good work.

Clinically considered, peritonitis arises in almost every instance from four of our regions—the appendix, the pelvis organs, the pyloric region, and the gall bladder. Many special causes exist, but if we confine ourselves to the organs mentioned, we shall have considered the major portion of the subject. The recognition of peritonitis secondary to disease of one of these organs, is not often a matter of great difficulty, if we go to the trouble to make a careful examination. Everyone is familiar with the classical picture of peritonitis, but that which counts in peritonitis is early recognition, and the classical picture is not that of an early, but an ad-

vanced state of the disease. The sign which has served us best is rigidity. We are always suspicious of increased tension of a portion of the abdominal muscles. If definite rigidity, spasms, and tenderness are present, it is pretty safe to assume that some disease is present which has gone so far as to involve the peritoneum. The existence of symptoms indicating that an inflammatory process is going on within the body, such as fever, increased pulse rate, and leucocytosis, is helpful, but not essential.

If there are characteristic symptoms of a certain condition, such as appendicitis, which is commonly known to cause peritonitis, the diagnosis is much strengthened; but, again, this is not necessary. More or less pain is always present, but is often due to the disease causing infection of the peritoneum rather than to the peritonitis itself, which is often not especially painful. The prognosis in peritonitis is influenced chiefly by: the type and degree of the infection; the situation of the infection; the time of operation; the operation itself; the preoperative treatment and the post-operative treatment.

As we have seen, infections exist which doom the patient from the start. However early the diagnosis, however skillful the general and operative treatment, the factor of prime importance is that the patient may have the resistance necessary to overcome whatever infection is present. Certain patients die, with or without operation and irrespective of the time or method. They figure as a small percentage in our mortality. At the other extreme we see infections of such exceeding mildness as scarcely to cause a symptom. It is beyond our diagnostic power to say at the outset of any peritoneal infection whether or not it belongs to either of these extremes or in the intermediate group.

Closely related to the type of infection is the degree of infection. While the peritoneum can care for small amounts of moderately virulent organisms, the same organism in larger numbers may be able to establish a footing and set up a dangerous peritonitis. Perforations and gangrene, therefore, as is well known, are apt to cause a dangerous peritonitis, while the migration of a few of the same organisms through an inflamed intestinal wall would scarcely excite a peritoneal reaction.

Unfortunately, it is not always possible, and when possible does not always happen, that surgical aid is employed in the nick of time and many cases first come to the surgeon in much more advanced stages of the disease. It is high time that it is generally and thoroughly understood that the majority of such cases reach their deplorable state through a current misconception of the origin and course of peritonitis and the nonoperative measures which are most effective in its control. It would seem that enough had been said in emphasis of the dangers of delay in the surgical treatment of appendicitis and other intra-abdominal diseases which are prone to be complicated by peritonitis to impress any man who is capable of receiving an impression and acting upon it. It may do some good, therefore, if we point out to the congenital delayer that if he abandoned some of his present practices, he would at least send his patient to the surgeon when it becomes obvious that he must do so, in a much more favorable condition for operative recovery.

I have in mind particularly the prevalent practice of purging in all abdominal diseases. If it is rational to hope for isolation of an infected focus, is it rational to set up a violent peristalsis which will oppose or prevent such plastic isolation? If the physician is so bold as to attempt the medical treatment of peritonitis until it becomes evident that he has failed, he should at least give his patient the benefit of the measures which have been shown by abdominal surgeons the world over to be most efficacious in the nonoperative treatment of the disease.

It is not necessary or wise to drain early in cases which show a limited amount of nonodorous turbid fluid. True, pus should always be drained. Tubes are the only reliable drains. A glass tube is best for the pelvis, rubber tubes are best elsewhere. A cigarette drain is excellent when there is nothing to drain, or where it is merely to connect a point of doubtful vitality with the surface and wall it off from the general cavity. Drains exercise a drainage function for only a few hours, so far as the general cavity is concerned. Gauze as a drain is inefficient, and acts as a plug. It is excellent to excite adhesions that will isolate a doubtful point from the general cavity or to keep an incision from closing over an infected area.

Rubber tissue may be used alone with satisfaction in many cases in which cigarette drains are advocated, and it may be used as a partial cover for gauze in order to lessen the

density of the peritoneal adhesions excited by gauze alone. Drainage requires individual adaptation to the case, and its mastery demands experienee, knowledge and judgment.

The post-operative treatment is "let him alone." If the operation is properly timed and well exeeuted, there will be little to do, and the less done the better. A sharp watch must be kept for eomplications, and symptomatic treatment given for individual conditions as they may arise, but of routine measures there is little to say. The sitting posture, proctoclysis, nothing by mouth, and careful nursing, are the important factors. Water, hot or eold, or cracked ice, is started when peristalsis begins as evidenced by the passage of gas. Nausea, vomiting, and persistent regurgitation, or excessive upper abdominal distention, calls for the stomaeh tube.

An enema is given and the proctoelysis discontinued when evidenee of a return of peristalsis presents itself. Morphin is given only for shock or for the definite indieations of pain or restlessness uncontrollable by a tactful nurse. Albumen water, buttermilk, broth, tea, toast, eggs, and the ordinary soft hospital diet is begun after it is apparent that water is tolerated.

"Canecr appears to be neither hereditary nor contagious, according to an investigation of life insurance statistics recently completed by Arthur Hunter, president of the Actuarial Soeiety of America. Utilizing the large mass of vital statistics reeorded with special accuracy and detail by six of the largest American life insuranee companies which co-operated with many others in the recent medico-actuarial mortality investigation, Mr. Hunter reports that the cancer rate among those in close attendance upon sufferers from this disease is only normal and that the same normal rate prevails among those whose parents or grandparents died of eancer. Summarizing this investigation in the words with which he coneludes his address, 'the statistics show that a man or a woman, one or both of whose parents died from cancer, is no more likely to die from that disease than those whose family history was free from that blemish; strong proof should be presented in the future to justify asking the publie to take any other point of view. Men and womcn who are in anxiety of mind on aecount of the appearance of cancer in their aneestry or immediate family may dismiss such anxieties, as there is no statistical evidenee at the present time that the disease of cancer is transmitted by inheritanee in mankind.' "—Extract of an address delivered by Mr. Arthur Hunter, president of the Aetuarial Society of America and aetuary of the New York Life Insurance Company, at the tenth annual meeting of the Association of Life Insuranee Presidents, New York, December 15, 1916.

ACUTE SYPHILITIC MENINGITIS.

By Boris Bronstein, M. D., Odessa, Russia.

Bronstein considers that the term acute syphilitic meningitis should be more partieularly applied to acute meningeal phenomena of the secondary period, sometimes preceding, but more frequently aeeompanying the eutaneous manifestations of this period. The pathology is essentially a meningovaseularitis with hyperseeretion of the eerebrospinal fluid. Prodromal symptoms, such as headache and insomnia, may or may not occur. Acute syphilitie meningitis at its height, as Bronstein says in the Deeember International Clinics, presents the clinieal picture of the tubercular form, differing from the latter by the indistinetness of the symptoms, sueh as eontraetures and stiffness of the neek, and by absence of any marked disturbanee of the pulse and respiration. In the luetie form, fever is apt to be absent and there may be remissions and relapses. Lumbar puncture reveals a considerable hypertension of the cerebrospinal fluid, albumin in quantity, and a marked lymphocytosis with plasmozellen. The cerebrospinal fluid may yield a positive Wassermann even when the blood serum is negative. Other manifestations of syphilis are to be looked for. The immediate prognosis is rarely fatal, but the ultimate prognosis should be reserved. Prophylaetic treatment is recommended whenever the cerebrospinal fluid shows a lymphocytosis, even when all meningeal symptoms are wanting. The treatment eonsists in frequently repeated removal of the eerebrospinal fluid in considerable amount, combined with intravenous injeetion of cyanide of mereury and intraspinal injections of eolloidal mercury. Neosalvarsan or salvarsan have a much more rapid action, but must be prudently handled in neurologic lesions of syphilis.

THE JOURNAL
OF THE
Arkansas Medical Society

Owned and controlled by the Arkansas Medical Society and published under the direction of the Council.

DR. WILLIAM R. BATHURST, Editor

PUBLISHED MONTHLY. Price, $1.00 a Year in Advance. Single Copies, 25 Cents.

Entered as second-class matter, June 21, 1906, at the postoffice at Little Rock, Arkansas, under Act of Congress of March 3, 1879.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Address:
The Journal of the Arkansas Medical Society,
810 State Bank Building,
Little Rock, Ark.

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ANONYMOUS COMMUNICATIONS.
Anonymous communications will not appear in the columns of this Journal, no matter how meritorious they may be.

Editorials.

HOME TALENT FOR THE MAY MEETING.

In the January issue of The Journal we asked for suggestions as to whether imported talent, as heretofore, should be invited to help make the May meeting a success, or should home talent be relied on exclusively. From the replies received the concensus of opinion distinctly favors leaving it up to the home talent—and it may be added that there is plenty of talent if it can be commandeered or volunteered.

It is therefore settled that the scientific program will be furnished entirely by Arkansas physicians. But it is essential that the Program Committee be given the zealous cooperation of the members throughout the state. There are plenty of high-class physicians and capable orators in Arkansas, and we believe the fact that no outside talent is to be invoked will result in creating greater interest and a tendency to develop the capabilities of the rank and file. No great man in any line of human endeavor ever yet dropped out of the game of life without someone to promptly take his place. From Alexander to Grant, from Nelson to Dewey, from Cæsar to Wilson, no country ever suffered an irreparable loss because of the taking off of its greatest soldier, statesman or other leader. So when we cannot have the help of imported talent we must look for it at home, and there is no question but that it will be well supplied. We want to have every county in the state represented on the program; but we must have ample time in which to arrange the program, so we request and even urge that there be no delay in sending applications for space.

DR. MAYO AND THE STATE GENERAL HOSPITAL.

The legislature is to be congratulated and praised for its action in giving the state what it has so long and urgently needed—a State General Hospital. Incidentally the medical profession, which as a whole has labored to that end, is under obligations to Dr. Charles Mayo of Rochester, Minn., president-elect of the American Medical Association, who visited Little Rock to attend the Social Welfare Conference and in addition to addressing the conference on the subject, also addressed both houses of the legislature, showing the need of Arkansas keeping pace with her sister states in so important a matter. Dr. Mayo, speaking at the Welfare Conference, showed also how a general hospital would raise the grade of the Medical Department of the University of Arkansas by giving the students facilities for hospital practice.

It is an honor in itself to have the presence of so distinguished a member of the profession. It is an additional honor when he takes up a local and state problem and lends his efforts to correct an omission which has been a detriment to the state. Arkansas has taken care of her blind, her deaf mutes and her insane, but has utterly neglected to care for her general sick, except in the inadequate measures possible by county effort. The consequence has been that while the counties with larger populations, such as Pulaski, Jefferson and Sebastian, have provided hospital facilities, the counties of smaller population have had to put up with makeshift methods without facilities for operations or the treatment of grave cases of any kind.

"LETTERS TO THE EDITOR."

We are contemplating introducing a new department in The Journal which we believe would tend to increase interest in it. It is a standing joke that the Englishman, whenever anything occurs which meets with his disap-

proval, immediately writes to the Times. Many of our big dailies make "Letters from the People" a feature—some even give them part of the editorial page. It is more fitting that The Journal should do this than a daily newspaper, for the simple reason that The Journal really belongs to the Arkansas Medical Society and to every member thereof. There are many things of interest to discuss. There are abuses to be corrected; needed legislation to agitate; sanitary suggestions; systems of keeping books and collecting accounts. In short, there is practically no end to the various matters of common interest which inhere in such communications.

But because The Journal is yours, this department will not be added unless the members express a desire for it. It will be understood that certain rules will be observed to regulate this department, if established. The chief one is that no anonymous communications will be published, and that while the writer may hide his identity under a nom de plume, if he so desires, his name, not for publication, but as an evidence of good faith, must accompany the article.

One other matter is that writers must write only on one side of the paper. Printers are peculiar people and will not look on both sides of manuscript. That is a rule, with them, that like the laws of the Medes and Persians, changeth not.

Will our readers kindly write us and say what their wishes are in this matter. We want to make The Journal always better, but we want the consent of the members before going into an entirely new field.

THANKS, BUT WOULD LIKE MORE.

In the December issue of The Journal we presented under the caption "Bulletin No. 12," certain twin resolutions suggesting that the members of the Arkansas Medical Society resolve to give in this year of grace 1917 thoughtful care to each issue of The Journal; to patronize the advertisers in The Journal, speak well of the products advertised by them, if found worthy, and co-operate with The Journal in securing the continuance of such advertising by supporting the advertisers wherever possible; because they are the support of the society's paper. At the bottom of Bulletin No. 12 we appended a pledge to be signed and mailed to the editor, promising to do the things therein set forth.

We wish to express our appreciation to the many who have signed that pledge. But not all the members have done so, and, like Oliver Twist, we cry for more. The Journal could not exist but for the advertisers, unless the members would consent to be assessed for the whole amount necessary to publish it—and they would certainly protest at the size of the assessment. There is no profit, no graft, nothing for anyone concerned. The Journal is the property of the society and every member has as much title as another in ownership. Therefore, we are only asking you to do something for your own property. Seeing the point, will not all who have not signed that pledge do so and forward to the editor forthwith?

Abstracts.

CEREBRAL MALARIA.—O. T. Brosius, Panama, R. P. (Journal A. M. A., January 13, 1917), reports a case of interest from a diagnostic standpoint. The patient, a girl, aged eleven, was sent by the health authorities of the City of Panama to the Santo Thomas Hospital. She had suffered with malarial symptoms followed by convulsions and right hemiplegia. The examination of the blood showed the presence of crescents and many ring forms of mostly the estivo-autumnal parasite, a few of them showing tertian characteristics. Before sending the patient to the hospital, her physician had administered 7½ grains of quinin hydrochlorid intramuscularly. The patient did not talk and was in semicoma, the neck quite rigid, eyes rolled upward, and the head pulled back a little. There was absolute flaccid paralysis of the right arm and leg, but no paralysis of the face, and no difference in temperature of the two sides. Her recovery was rapid under anti-malarial treatment. The paralysis disappeared on the second day. Lumbar puncture showed no abnormality of the fluid. Accepting the theory that the condition of malaria is due to emboli formed by the parasites, this case was unusual in having the paralysis only on one side.

CHRONIC DUODENAL INDIGESTION IN CHILDREN, by John Foote, M. D., Washington, D. C.—This condition is said to occur most frequently in children after the first year, and especially in those who have suffered from dietetic errors, usually with

antecedent contagious diseases, or from prolonged intestinal infections, and this is fully covered by Foote in the December International Clinics. This form of indigestion seems to be accompanied by deficiency or pancreatic ferments, especially lipase. A mild duodenitis, which either passes up the pancreatic duct, or diminished hormone formation, seems responsible for the condition. Diminished bile production may also be a factor. Anemia, loss of weight and mental underdevelopment occur. Large pendulous abdomen are common. Bottle feeding has been employed. Fever may be encountered, vomiting almost never. The number of daily stools varies from three to twelve. They are thin, contain some mucus and flakes of whitish material and have a very foul odor. They give an acid reaction and microscopically contain not only large quantities of fat soaps, but also a considerable amount of neutral fat, but rarely starch granules. It is to be differentiated from mesenteric tuberculosis and acute duodenal indigestion. The treatment consists in reducing the food elements which have proven indigestible, namely, the fat, and stimulating enzyme production by the administration of hydrochloric acid and pancreatic ferments.

A CLINICAL CONSIDERATION OF MIGRAINE, by John A. Litchy, M. Ph., M. D., Pittsburgh, Pa.—Migraine is considered by the author as the most frequent headache, occurring in 700 of his 15,000 patients sick from all causes. He believes that the so-called acidosis in children may often be a forerunner of a well-established sick headache habit. The interesting relation between migraine and epilepsy deserves further study. Among the author's 15,000 patients, epilepsy occurred in seven, and both migraine and epilepsy in 70. Auerbach's theory, which attributes migraine to an actual disproportion between skull capacity and volume of brain, needs further proof. In the International Clinics for December, Dr. Litchy shows that the diagnosis is easy when there are headaches which are unilateral, periodical and hereditary, but when only one or two of these symptoms are present, or when there is only a periodicity of some of the minor symptoms or possibly of the auræ, the diagnosis may be difficult. Migraine is frequently mistaken for pelvic disease, for acidosis or cyclical vomiting in children, and organic disease, when some of the auræ are present. The psychasthenic and the gastric symptoms frequently lead to confusion in diagnosis. While the underlying causes of migraine are vague and furnish little light as to treatment, much can be done to ameliorate the symptoms by proper handling of the exciting causes that aggravate the patient's general condition and precipitate the attacks. Most thorough investigation and careful individualization are indicated. Systematic administration of the bromide salts and avoidance of undue fatigue are especially recommended.

Personals and News Items.

Dr. Thad Cothran of Walcott has moved to Jonesboro.

Dr. and Mrs. R. Y. Phillips of Malvern visited in Little Rock last month.

Dr. and Mrs. A. H. Tribble of Hot Springs visited in Little Rock last month.

Dr. E. P. Notrebe of Denver visited friends in Pine Bluff and Little Rock last month.

Dr. and Mrs. B. L. Hill and daughter of Stuttgart visited in Little Rock last month.

Dr. W. A. Snodgrass of Little Rock made a business trip to Muskogee, Okla., last month.

Dr. J. H. Lenow of Little Rock has moved his office from the Gazette Building to 104 Louisiana Street.

Dr. W. G. Eberle of Fort Smith has been appointed first lieutenant of the Medical Corps, Second Arkansas Infantry.

Will someone please furnish a paper on Electro-therapy for the next meeting of the State Society? Write The Journal.

Dr. J. E. Rooks of Shreveport has located in Little Rock and announces his practice limited to genito-urinary diseases.

Dr. Mahlon D. Ogden of Little Rock has been appointed a member of the Nurse Examiners' Board to succeed Dr. Ida Joe Brooks, resigned.

Every member of a county medical society should invite those of his professional brethren who are not already members, to join the local society.

At a recent meeting of the Pulaski County Hospital staff the following officers were elected for the ensuing year: President, Dr. A. L. Carmichael; vice president, Dr. R. C. Kory; secretary, Dr. M. D. Ogden; assistant

secretary, Dr. V. P. Wagley; treasurer, Dr. Wm. R. Bathurst.

Arkansas physicians visiting in Little Rock during the past month include: C. S. Holt, Fort Smith; R. C. Dorr, Batesville; Earle H. Hunt, Clarksville; G. A. Warren, Black Rock; J. T. Clegg, Siloam Springs; T. B. Bradford, Cotton Plant; S. A. Southall, Lonoke; F. O. Mahoney, El Dorado; J. C. Land, Walnut Ridge; J. B. Phillips, Benton; Orvis Biggs, Hot Springs; E. L. Watson, Newport; T. J. Stout, Brinkley.

The Victor Electric Corporation of Chicago make their appearance this month with a half-page advertisement.

Their products consist of *x*-ray apparatus and electro-therapeutical equipment. We can vouch for TRUTH at all times in their advertising, and ask our members to favor those who favor us.

Here is another dose of bad news. Unless you have paid your dues your subscription to The State Medical Journal has expired—run out—exhausted, just like that!

The boss of this publication has put the kibosh on sending The Journal unless the annual dues have been paid.

Hard luck, but it is law. We hope to have you with us for another year. We want new members, but we cannot afford to lose the old ones, so we hope you will remain with us and give your moral and financial support, that the wheels of our great organization may revolve smoothly for another year.

ARKANSAS ACADEMY OF SCIENCES.

On January 11 a banquet was held at the Marion Hotel for the purpose of organizing the Arkansas Academy of Sciences. A board of eleven trustees and the following officers for the ensuing year were elected: Charles Brookover, Ph. D., president; Morgan Smith, M. D., vice president; Dewell Gann, Jr., M. A., M. D., secretary; Herbert A. Heagney, A. M., Ph. D., treasurer, and Troy W. Lewis, A. M., D. C. L., permanent secretary.

The academy is organized for the purpose of stimulating increased activity in scientific research and for the diffusion of scientific knowledge. The academy was incorporated as a learned scientific society. All persons interested in the increase of scientific knowledge may obtain membership in the academy, which will be located in Little Rock. The Fellows are elected from the membership by a majority vote of the Board of Trustees.

The laboratories of the Medical Department of the University of Arkansas and the Little Rock College, also those of Dr. Manglesdorf, have been tendered for the use of the Fellowship for scientific research purposes.

Obituary.

DR. EDWIN BENTLEY.—Dr. Edwin Bentley of Little Rock, age ninety-two, died February 5, 1917, at his residence after an illness of eight weeks, following a fall in the yard of his home. Despite his advanced age, he had been active in his work to the date of his illness and carried on a part of his former practice. Dr. Bentley served as a surgeon during the Civil War and received the rank of lieutenant colonel, in 1865, for meritorious service. He remained in army service until 1888, when he was retired from the service at Fort Brown, Tex. In 1878 he was stationed at the Little Rock barracks as post surgeon. He returned to Little Rock to live after being mustered out of service.

He was born in New London County, Connecticut, July 3, 1824. He entered the study of medicine and received diplomas from the University Medical College of New York in 1849. In 1878 he received diplomas from the Bellevue Hospital Medical College of New York and the College of Physicians and Surgeons in the City of New York. He entered the federal army in 1861 as assistant surgeon to the Fourth Connecticut Infantry and advanced rapidly to the rank of lieutenant colonel. Following the war he was successively stationed at Russell Barracks, D. C.; Lincoln Barracks, D. C.; Camp Reynolds, Cal.; Point San Jose, Cal., and in 1875 accompanied the Fourth artillery to the Black Hills during the Modoc War.

Dr. Bentley was active in building up the Isaac Folsom Clinic and the Medical Department of the University of Arkansas. He was well known in medical work and always took a great interest in the medical societies of the state. He was devotedly committed to a life of medical usefulness. He is survived by his wife and a son, Dr. Carle E. Bentley of Little Rock.

Funeral services were held at the family home February 6, Bishop Winchester and Rev. Forney Hutchinson officiating. The body was sent to Washington, D. C., for burial in the National Cemetery at Arlington, Va.

County Societies.

MILLER COUNTY.

(Reported by Benj. C. Middleton, See'y.)

The Miller County Medical Society met in regular session January 12, 1917. Members present: Drs. J. N. White, S. A. Collom, R. L. Grant, H. R. Webster, J. K. Smith, L. H. Lanier, Preston Hunt, A. G. Lee, K. M. Kelly, William Hibbetts, E. M. Watts, T. F. Kittrell, T. E. Fuller, B. C. Middleton, with Dr. M. A. Bizzell visitor.

Dr. E. A. Baggetts, of Womble, and Dr. E. B. Buehanan, of Texarkana, were eleeted to membership.

Dr. R. L. Grant read a very interesting paper on "Cholecystitis" with special referenee to eholecystenterostomy as a treatment, which elieited a very interesting diseussion.

The meeting adjourned to meet on the seeond Friday in February.

PULASKI COUNTY.

(Reported by Geo. B. Fleteher, Sec'y.)

The Pulaski County Medieal Soeiety met January 8. In the absenee of President Saxon, Dr. J. B. Dooley presided. Members present were: Drs. Robinson, Fleteher, Snodgrass, Hudson, Meek, Hardeman, Howell, Rooks, Zell, Dunaway, Dooley, Caldwell, Doyne, Pettus, Harris, Gibson, Kirby, Ogden and Judd.

The essayist for the evening, Mr. Hay Watson Smith, being ill, was unable to attend.

Dr. Kirby reported in detail four eases of exophthalmie goiter, and Dr. Caldwell reported a ease of thoracie aneurysm, the first symptom of whieh was paralysis of a voeal eord. Dr. Rooks read a short paper entitled "The Vera Montanum as a Faetor in Sexual Neurasthenia."

Drs. Mumey, Rose, Lee and Higgins were elected to membership in this society.

INDEPENDENCE COUNTY.

(Reported by L. T. Evans, See'y.)

The Independenee County Medieal Soeiety met December 11, 1916. Present: Drs. Ball, Case, Craig, F. A. Gray, Hinkle, Johnston, Lawrence, of Batesville; MeAdams, of Cord; Hayden and Jeffery, of Bethesda; Robertson, of Sulphur Rock; Rodman, of Newark; Bone, of Cushman, and L. T. Evans, of Mt. Pleasant.

The following papers were read: Report of a ease of "Nevus in an Infant," Dr. Rodman; "Pneumonia," Dr. Case; "Gall-stones," Dr. Jeffery.

Offieers elected for 1917: President, Dr. Paul H. Jeffery, of Bethesda; viee president, Dr. M. S. Craig, of Batesville; secretary, Dr. L. T. Evans, of Mt. Pleasant; delegate, Dr. W. B. Lawrence of Batesville; alternate, Dr. F. A. Gray, of Batesville.

Program for next meeting in February—Drs. Ball, Kennerly, Rodman, F. A. Gray and E. M. Gray.

JOHNSON COUNTY.

(Reported by Earle H. Hunt, Sec'y.)

The Johnson County Medieal Soeiety met in regular session in Dr. L. C. Gray's office with the following members present: Drs. Geo. L. Hardgrave, J. W. Ogilvie, L. C. Gray, W. R. Hunt, H. L. Boyer, J. S. Kolb and Earle H. Hunt.

The following offieers were eleeted for the year 1917: President, J. W. Ogilvie, of Harmony; viee president, H. L. Boyer, of Hartman; seeretary-treasurer, Earle H. Hunt, of Clarksville. The delegate to the State Soeiety meeting will be eleeted at the April meeting.

Dr. L. C. Gray gave a talk on "Ophthalmia Neonatorum," diseussed by all present. Dr. W. R. Hunt reported a ease seen in eonsultation with Dr. Graves, of "Retained Placenta," that had been retained in the uterus for seventy-two hours, by an hour glass eontraction. Patient had temperature of 105 before removal, which dropped to normal in three hours after removal. Essayist for next month, Dr. H. L. Boyer; subjeet, "Pneumonia."

JEFFERSON COUNTY.

(Reported by J. Frank Lieberman, Sec'y.)

A regular meeting of the Jefferson County Medieal Society was ealled to order by its president, Dr. J. T. Palmer, on the night of Tuesday, February 6, 1917, in the offiee of Drs. Jenkins, Withers and Breathwit. Present: Drs. Breathwit, Crump, Glover, Lemons, Lieberman, McMullen, Palmer, Shelton and Woodul.

The minutes of the previous meeting were read and approved without correetion.

Under the head of elinieal eases Dr. Lemons reported that an exploratory laparotomy had been done by Dr. John S. Jenkins upon

the young patient with the large, irregular liver that he had spoken of at the last meeting. It proved to be a small, round cell sarcoma, involving the entire liver, and almost the whole organ had undergone necrosis until the greater part of the tissue was gelatinous in character. Nothing was attempted in the way of removal, the abdomen being closed immediately, but the patient never rallied, dying about three hours later.

Dr. E. C. McMullen reported a severe burn covering almost the entire body, that lived about eighteen hours after the accident.

Dr. M. A. Shelton reported a case of elephantiasis of the labia minora in a negro woman, and stated that he had hoped to have her present, but she failed to appear.

Dr. William Breathwit read a very interesting and instructive paper on "Focal Infection of the Facial Sinuses." The writer called attention to the frequency with which these infections were overlooked and the gratifying result that followed when these conditions are diagnosed and treated properly. He showed that headaches were far more frequently caused by these infections than by eye strain, as was the common belief. The treatment of these infections, of course, meant the locating of the pathological conditions and drainage or local applications depending upon the degree and extent of the infection.

The paper was discussed by Dr. McMullen, who reported a case in common and gave the following history: Adult female who began with a chronic frequent micturition, voiding perhaps every hour, about one or two drachms. This condition disappeared in about a month and she was free from all symptoms for about one year; she was given the usual urinary antiseptics with relief during this second attack. In about six months she had another attack with symptoms worse than at any previous time. Catheterized specimen from bladder showed diplo bacillus of Friedlander. The ureters were catheterized and showed infection coming from the kidney. Irrigation of pelvis of kidney failed to produce a cure, but there was unquestionable improvement in symptoms, which was only temporary. About this time she had an attack of tonsillitis followed by tonsillectomy, and from the cut surface of the tonsils pure cultures of Friedlander's bacillus were found. After a few more irrigations the condition cleared up and she has had no further trouble.

Dr. J. F. Crump in his discussion merely emphasized some of the points brought out by Dr. Breathwit.

Dr. Breathwith in concluding, reported a case of an adult male who eleven years ago had an infection of the ethmoidal sinuses. Following this he had a reflex choroiditis in the right eye, followed by cataract with operation for same, but he finally went blind. Patient was given anti-syphilitic treatment with no result; the Wassermann was negative from the beginning. About this time he was seen by Dr. Breathwit, who made a diagnosis of a facial sinusitis with beginning choroiditis in left eye. It was too late to arrest the condition at this time, while if it had been treated for his ethmoidal sinusitis eleven years ago it was believed prognosis would have been more favorable.

The president appointed Drs. J. F. Crump and C. K. Caruthers to read papers at the next meeting, and Drs. J. F. Gill and C. F. Glover for the April meeting.

Society adjourned at 9:30.

SEBASTIAN COUNTY.

(Reported by S. J. Wolfermann, Sec'y.)

Sebastian County Medical Society met in the Carnegie Library meeting room in regular session February 13. President W. G. Eberle presided. Minutes and regular business transacted and the committee appointed to report upon contract practice stated they were ready to report.

The chairman, Dr. J. G. Eberle, stated that numerous letters had been mailed to doctors in neighboring towns, many of whom were doing some form of contract practice, asking them their views of contract practice. Without reading the name of the writer, Dr. E. C. Meyers read these letters to the society. Dr. J. G. Eberle then read the following report:

Report of Committee on Contract Practice.

Mr. President and Members of the Sebastian County Medical Society:

We, your committee to whom was referred the question of contract practice, after mature consideration of the subject beg leave to report as follows:

We are of the opinion that all forms of contract practice from that of railroad practice on down to that of lodge practice, are

strictly speaking, a violation of the prineiples of ethics. For any man to cut the priee for professional services that has been aeeepted as fair and equitable, is to take advantage of his fellow-practitioner, and is therefore unethical.

We quote from a report of the committee to investigate the evils of contract practice of the Erie County Medical Society, made at Buffalo, N. Y., as follows:

"We do not eare whether the physician is overpaid or underpaid. We are attacking it because the principle underlying it all is unethical, unjust and in every ease injurious to the profession in general. The surgeon who holds a railroad contract holds it with the proviso that he co-operate with the railroad, and work against the interests of the poor unfortunate who happens to come under his charge. This, of course, is a good thing for the railroad, a nice thing for the surgeon since it nets him a yearly salary, but a very bad thing for the public. We found that undoubtedly this particular form of contract is the grandparent of the rest. In justice to our sense of fairness we could not possibly take any aetion against the small offenders without attacking these polished violations of the ethical laws, who are seemingly responsible for the others."

And again, "If medicine is a profession, if it stands for something more than mere commercialism, if it possesses every quality that is honorable and noble, then we should do nothing to degrade it. We should rather raise it until it has reached the climax of ethics and its standard has become the highest obtainable."

While your committee concurs in the views above quoted in general, we realize that the exigencies of the times demand that certain forms of contract practice should be tolerated, as that of railroad surgeon, the surgeon in the coal-mine town, and the medical examiner for fraternal insurance societies where the membership is composed largely of the poorer classes of men and women who are unable to pay large fees.

We mailed a list of questions, a copy of which is attached to this report, and addressed them more particularly to physicians practicing in coal-mining districts, and have received quite a number of replies to this letter.

We find that a very large majority of these physicians who are engaged in practice in the mining sections are opposed to the contract system of practice, and some of them expressed a wish to support the Sebastian County Medical Society in any measures which it may adopt to remedy the evil.

The grounds upon which objection is raised are as follows: The present system of contract practice is not necessary, even in the mining sections. It lowers the standards of medical practice. It is unethical, because it is secured by direct, or indirect solicitation, which encourages the payment of commissions to secure the business to enlarge the list. It is not humanitarian in that it makes no provision for those who are not able to pay. It is unfair because it deprives the individual of the right to choose the physician he prefers, and prevents the physician from having an equitable share of the business he is entitled to and would get otherwise.

It is objectionable, because it is an effort on the part of a few selfish, self-interested physicians to align themselves with various fraternal, social and industrial organizations, for the purpose of exploiting themselves and to deprive other physicians of a fair and just compensation, and the right to compete honorably for the business.

The tendency of contract practice is to commercialize the business side of medical practice on a cut-rate basis, with utter disregard for value of service rendered, or the best interests of the medical profession as a whole, or of those who are entitled to choice as to who shall render the services.

It is a reflection upon the dignity and intelligence of organized labor to bind its members in a semi-charitable contract and thus place them in a lower social cast, who must be provided for by a system of paternalism and charity.

It is a challenge to organized medicine to submit to unethical and unfair competition of those who would retain membership in the organization, and at the same time openly disregard business ethics, and the rules and regulations of the medical society.

We recommend that they cease to make these unfair cut-rate contracts, or withdraw from membership in the Sebastian County Medical Society.

J. G. Eberle,
E. C. Myers,
St. Cloud Cooper.

The report was accepted by the society, following which the regular essayist for the evening, Dr. J. G. Eberle, read a most interesting and instructive paper upon arterial hypertension. The paper was freely discussed by the members present.

The hour being late, the second paper for the evening, "Fractures About Joints," with x-ray illustrations, by Dr. Clark Wood, was postponed until the next regular meeting, February 27.

Meeting then adjourned.

Members present: Drs. S. L. Brooksher, J. H. Buckley, J. H. Benefield, St. Cloud Cooper, D. R. Dorente, J. G. Eberle, W. G. Eberle, J. A. Foltz, M. E. Foster, D. W. Goldstein, A. E. Hardin, A. F. Hoge, C. S. Holt, G. F. Hynes, E. L. Lindsey, E. C. Myers, J. M. McGinty, H. Moulton, R. F. Parks, I. A. Ryan, J. D. Southard, C. P. Wilson, Clark Wood, H. H. Smith, S. J. Wolfermann.

Book Reviews.

The Medical Clinics of Chicago.—Volume II, Number 11. (September, 1916. Octavo, 196 pages, 22 illustrations. W. B. Saunders Company, Philadelphia, 1916. Price per year: Paper, $8.00; cloth, $12.00.

Among the interesting articles in this number, we wish to call the attention of our readers to the following: "Feeding the Normal Baby with Artificial Foods." "Food Preparations." "Clinics of Dr. Ralph C. Hamill, Northwestern University Medical School." "Etiology and Treatment of Acne." "Clinics of Dr. Joseph Zeisler, Northwestern University Medical School."

The Practical Medicine Series, comprising ten volumes on the year's progress in medicine and surgery under the general editorial charge of Charles L. Mix, A. M., M. D. Volume VI. General Medicine—Edited by Dr. Frank Billings, assisted by Dr. B. O. Raulston. Series 1916. Published by the Year Book publishers, 327 S. LaSalle St., Chicago. Price of this volume, $1.50. Price of the series of ten volumes, $10.00.

The present volume is one of a series of ten issued at about monthly intervals and covering the entire field of medicine and surgery. Each volume being complete on the subject of which it treats for the year prior to its publication. This series is published primarily for the general practitioner; at the same time the arrangement in several volumes enables those interested in special subjects to buy only the parts they desire.

International Clinics.—A quarterly of illustrated clinical lectures and especially prepared original articles by leading members of the medical profession throughout the world. Edited by H. R. M. Landis, M. D., Philadelphia. Volume III. Twenty-sixth series, 1916. Published by J. B. Lippincott Company, Philadelphia.

This number is divided into seven departments, namely: Treatment; Diagnosis; Pediatrics; Dermatology; Psychiatry; Surgery; Historical. A large number of illustrations are given with one-colored plate showing a mixed tumor (sarcoma) of kidney removed from an infant twenty-one months old. Tumor grew from lower pole of kidney. Posterior view. (Ureter not shown.) The first article is by Dr. Henry Tucker, Philadelphia, on "Gonorrhea in the Male."

Progressive Medicine.—A quarterly digest of advances, discoveries and improvements in the medical and surgical sciences. Edited by H. A. Hare, M. D., assisted by L. F. Appleman, M. D. December, 1916. Published by Lea & Febiger, Philadelphia. $6.00 per annum.

Among the interesting articles in this number is one by Dr. Joseph C. Bloodgood, who writes on "Surgery of the Extremities, Shock, Anesthesia, Infections, Fractures and Dislocations and Tumors."

Military surgery is referred to with a short description of "Organization," "First Aid on Firing Line," "Operation Room in the Trenches," "Transportation," "Unit Plan for Base Hospital," "Gunshot Wounds," "Dakin's Solution," "Carrel's Method," and "Gunshot Fractures."

THE CARREL METHOD OF WOUND TREATMENT.—The disinfection of war wounds by the Carrel method as carried out in an ambulance at the front in the present war is described by H. H. M. Lyle, New York (Journal A. M. A., January 13, 1917). The basis of the treatment is the sterilization of the wound by a suitable antiseptic reaching every portion in a sufficient concentration for a period long enough to destroy the infecting micro-organisms. The chemical destruction of the micro-organisms depends on the difference of the resistance existing between the tissues involved and the bacteria. The Carrel method enables us to secure this. The antiseptic employed in Dakin's sodium hypochlorite, 0.5 per cent. It is an ideal isotonic wound antiseptic of high bactericidal activity and low toxic or irritating quality. The latter feature distinguishes it from Javelle water, Labarraque's solution, etc. The commercial hyperchlorites are of inconstant composition, and generally contain free alkali or free chlorin. They are therefore irritating and not to be used. Dakin's solution properly made has the great advantage of being able to dissolve pus, old tissue debris and blood clots, while the living tissues resist. The thoroughness of the first surgical aid is most important, and it should consist in a thorough, mechanical disinfection and cleansing from all dirt and

foreign substances. The operative field is painted with tincture of iodin, and bruised and necrotic skin edges trimmed away with a sharp knife, which is then laid aside. Fresh instruments are then used to lay the wound open like a book, and it is gently explored for shell fragments and clothing shreds, etc. Gentleness of manipulation is the keystone of the technic, and any rough handling or bruising is a crime. To avoid overlooking blood-stained and encrusted debris, fragments of bone, etc., the same minute and careful technic is used in bone wounds as in the soft parts. A careful revision of the wound is made and particular attention given to perfect hemostasis, which is necessary with Dakin's solution, which has the power of dissolving blood clots. Next, the instillation tubes are placed in the wound so that the liquid will come in contact with every portion. A thin layer of gauze is placed over the wound and around this the required number of tubes, secured to the wound edges by a rubber cuff and suture, or a two-way tube is used. Details are given by Lyle as to the necessary placing of the tubes. In the simple type of penetrating wounds a tube without lateral perforations is introduced to the depth of the cavity and the solution allowed to well up from the bottom. In a large tract terminating in a cavity with irregular collapsible walls, a little gauze is introduced to support the walls of the cavity and allow a more thorough penetration of the fluid. Penetrating wounds with the point of entrance in a dependent position (as the buttock, posterior surface of the extremities, and the back) are treated with perforated tubes dressed with toweling. These dressed tubes keep the antiseptic in contact with the wound. A suitable nonperforated tube can also be used. In through-and-through wounds, a perforated tube with the tied extremity uppermost is passed from the lower to the upper wound. The liquid, escaping through the small lateral holes, flows back along the tract to the inferior orifice, moistening the entire wound. Wounds of the hand or foot, open amputation stumps, etc., are immersed in Dakin's solution for from ten to fifteen minutes every two hours until the wound is sterilized. The skin is protected by smearing it with sterile yellow petrolatum. The gloved hands are never allowed to come in contact with the wound in dressing. The instillations of the fluid are made every two hours by releasing the adjustable clamp controlling the flow, the amount being governed by the needs of the case. When the wound has become sterile the tubes are removed and the compress, moistened and Dakin's solution applied. Formerly a continuous instillation was used. Once a day or oftener, careful inspection of the wound and dressings and flow is made. Flushing the wound shows if the solution is being delivered as planned, but there is not a continuous irrigation, only a mechanical attempt to deliver a definite chemical antiseptic to every portion and to insure its contact for a prolonged period. To protect the skin from the liquid, gauze impregnated with yellow petrolatum is applied to the skin surfaces below the wound. Regular determination of the number of microbes on the wound surfaces is made by transferring on a standard loop a portion of the secretion to a slide and a count of the number of microbes in the field every second day, record being made. Absence of microbes from the wound for three successive days is considered to indicate sterilization of the wound. It is best to begin the bacterial chart one or two days after reception of the patient. Wounds of the soft parts are sterilized in from five to eight days, while greatly traumatized wounds and fractures require a considerable longer period. All bone sequestrums must be, of course, removed. When the wound has been shown sterile for three days it is closed by careful layer sutures, and for extensive wounds traction strips are used. Details of the routine method at Hospital B, American Ambulance, are given, and the results of the Carrel method were most favorable. The immediate complications became rarer and suppuration almost entirely disappeared. Lyle's summary is given as follows: "The Carrel method is not a continuous irrigation. It is not dependent on the miraculous power of an antiseptic, or on any one feature of the method, but on the combination of the whole. It is a method of sterilizing wounds by mechanically delivering an antiseptic of definite chemical concentration to every portion of a surgically prepared wound and insuring its constant contact for a prolonged period. The progress of the sterilization is rigorously controlled by the microscope. Gentleness, thoroughness, and attention to detail are essential for success. I firmly believe that the adoption of this method is destined to save many lives, to reduce the gravity of the mutilations, and allow the rapid return to the front of many men who would otherwise be lost to the service of their country." The article is illustrated.

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THE JOURNAL OF THE Arkansas Medical Society

Owned and Published Monthly by the Arkansas Medical Society

VOLUME XIII
No. 10

LITTLE ROCK, MARCH, 1917

Yearly Subscription $1.00
Single Copy 25c

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OF THE

Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIII. LITTLE ROCK, ARK., MARCH, 1917 No. 10

Original Articles.

THE MANAGEMENT OF FRACTURES.*

By James A. Foltz, M. D.,
Fort Smith.

More than half a century ago Duncan Eve's made the following observation: "A thorough knowledge of anatomical relation of structures, a wide experience, practical common sense, calm judgment and constant vigilance are the characteristics a surgeon who is called upon to treat fractures stands most in need of." That observation is as good today as it was fifty years ago.

In 1913 A. Adolphus Komph created a new name when he wrote his paper on "Phthisio Fobia" (tuberculosis madness); someone of equal ability today ought to create a new term and write a paper on "Laparotomy Madness."

The first thing the surgeon in embryo does when he graduates from college is to supply himself with a couple of bright retractors, a set of Murphy buttons, a complete outfit for gastro-enterostomy, appendectomy, etc., and massing his surgical artillery with the mouths of all cannons pointing to the abdominal cavity, he awaits the opportune moment to strike. He does not even use the standard precautions laid down by our military strategists, that while preparing an attack on one point to see that all other points are strengthened, not weakened, but he proceeds in his laparotomy fobia as if this were all there was to surgery.

One of the most neglected of these side issues of surgery is the question pertaining to the management of fractures. Records of the great hospitals in Europe and in this country show that from one-fifth to one-seventh of all accidental injuries admitted to these insittutions are fractures and that the court records show that very close to 75 per cent of all suits for damages against physicians and surgeons, as well as railroads and other corporations, is for poor functional results following the treatment of fractures.

About the poorest advertisement a doctor can have in a community is a crooked or powerless limb; no argument can offset this damaging evidence; but this is not the worst: it is the permanent disability, produced, the damage done the patient, that is the most important consideration. When a man comes to a surgeon with a broken arm or leg he has the right to expect of that surgeon the possession and application of such knowledge and care as to give him the best functional results compatible with the conditions involved, and, as set forth in Duncan Eves' remarks, this often requires the highest degree of skill and anatomical knowledge coupled with a modern surgical experience and with practical common sense.

There can, of course, be no set rule laid down for the management of fractures, because the location, extent and condition of the fracture is different in almost every case and requires individual mastering.

The most important points in the management of fractures is first, *diagnosis*, and second, *treatment*. The most valuable aid which modern surgery has in the diagnosis and also in the treatment of fractures is the *x*-ray. The *x*-ray is valuable from two standpoints; first and most important, it is valuable to the patient by enabling the surgeon to have an accurate knowledge of the position of the bones and from which knowledge the patient reaps the benefit, and second, to the doctor because it renders much more difficult the task of the malingerer, should he sue for malpractice, claiming the presence of conditions which do not and did not exist.

I may say a word here of the method which I usually employ in the use of the *x*-ray; unless I am uncertain as to whether or not there is a fracture at all, I usually do not use the *x*-ray until after I have accomplished, to the best of my ability, the reduction of the frac-

*Read by title before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2, 3, 4, 1916.

ture which I know exists, and after the mobilizing of the parts in some form of a cast, then I have an *x*-ray picture made. I always take several pictures from different angles. If then the *x*-ray reveals the fact that the bones are in good apposition, well and good; but if it shows that my reduction has not been sufficiently accomplished and that the alignment is not sufficiently good to render a union that will give good functional results, then I ansethetize my patient again and attempt to correct the malposition which the *x*-ray shows to be present.

After this has been done and another cast applied, I again take an *x*-ray picture for the same reason as before. I have often taken three or four sets of pictures of the same injury before I considered the alignment satisfactory.

I may say just here that one very important lesson the *x*-ray has taught us is that perfect alignment is not necessary for good functional results, and, in fact, that perfect apposition and alignment is a condition which, far from being general, is indeed an exception even in the work of our most experienced and competent surgeons. This point has its value particularly in those cases where the doctor will be sued for malpractice and the *x*-ray is used to demonstrate some slight malposition or imperfect alignment.

In the reduction of simple fractures, one of the most important guides is comparison with the opposite side. All the fractures should be reduced under anesthesia; the parts should be freely exposed, both the injured member and its fellow of the opposite side; the reduction should be done thoroughly, painstakingly and carefully along the lines laid down by modern authorities for the reduction of the particular fracture involved. The contour should be made to correspond (unless there is too much swelling) exactly with the contour of the opposite member.

Once having secured a satisfactory reduction, and after having satisfied oneself by careful inspection and comparison with the opposite side that you have a satisfactory alignment, then great care is necessary on the part of the surgeon and his assistants to see that this arrangement is not disturbed in the subsequent manipulation necessary in the application of the cast or splint or whatever other retentive apparatus is decided upon.

What about the open treatment of fractures? I do not use the Lanes plates or resort to any of the different open methods of treatment unless the fracture proves to be rebellious, in which case the Lanes plates or wiring has given me excellent results.

In regard to the management of compound fractures, it is never permissible to plate these fractures until after ten days or two weeks has passed and nature has had a chance to throw a protecting wall around the injury, as Murphy expresses it, "to coffer dam the tissues."

I think the Lanes plates and several of the very excellent substitutes that have been recently introduced as substitutes, therefore bear about the same relation to the treatment of fractures as salvarsan does to the treatment of syphilis; both are more or less fads. Both are extremely valuable in certain types of cases, but neither are specific and neither are a panacea for all ills involved. And while it is quite true, as stated above, that there are certain types of fractures in which the Lanes plates and the direct wiring will prove a godsend, still the old methods of careful reduction and proper retention must remain the sheet anchor in the treatment of fractures for the mass of the profession, as mercury remains the sheet anchor in the treatment of syphilis.

In conclusion I want to make a plea for the following points:

First: Always be deliberate in your treatment of fractures; wait until you have the patient in the proper place and until you have assembled the things which you know you will need, or think you will need, before you attempt reduction.

Second: Always make your reduction under anesthesia; this is considered a very important rule, admitting of practically no exceptions.

Third: In case of great swelling and where there has been considerable traumatism, do not bother about the immediate reduction of the fracture, but make your patient comfortable by the use of sand-bags or soft pillow splints for several days until after the swelling has reduced and after the blebs which usually form in such cases have opened or dried, up and then proceed with your reduction and mobilization.

Always make it a point to use some form of cast that will permit you to frequently, or at least occasionally inspect your fracture, thus enabling yourself to intelligently observe what is going on, and if things have gone wrong you can make your correction before bony union becomes too firm to safely interfere.

RADIUM—ITS PHYSICAL PROPERTIES AND THERAPEUTIC VALUE.*

By Dewell Gann, Jr., A. M., M. D.,
Little Rock.

In such a limited time as is allotted to me, one could hardly give the barest outline of the physical properties of radium, to say nothing of its therapeutic value; therefore, it shall be my endeavor at this time to give only what might be termed salient facts, digressing at no point to discuss the pro and con of certain theories which pertain to the use of this element. A great deal has been written on the subject and I cannot better express my opinion of the literature than by quoting a few words from an article written by one of my predecessors[1]: "So much that is exaggerated, so much that is unscientific, so much that is absurd, has appeared in both the lay and professional press that it need not excite wonder that most of you are probably in doubt as to whether radium really belongs in the armamentarium of the physician or among the humbuggeries of the quack." Such a state of affairs is quite true.

Discovery.—A short time after the discovery of the *x*-rays by Prof. Rontgen (in 1895), many experimenters were attracted to this field of research, notably Prof. M. Henri Becquerel[2], to whom we owe the honor of the epoch-making discovery of radio-activity. It was he who, by accident, discovered the effects of uranium upon photographic plates to be due, not to the exposure to the sunlight or phosphorescent light of the salt covering the plate, but to an "inherent atomic" property of the element uranium. Following the discovery, Mme. Curie[3], while working on the radio-activity of uranium, conceived the idea that the ore, pitchblende, contained a body of much greater radio-active powers than uranium, and to her we are indebted for the isolation of an element which she was pleased to call radium.

Physical Properties.—Radium is derived from uranium by atomic reduction and belongs to the strontium-barium group of the alkaline earths. It is a metallic element, has a characteristic spectrum, an atomic weight of 226, and loses a portion of its atom to become a gas called radium emanation. Pitchblende contains one part of radium to 3,000,000 parts of uranium. There are a number of radio-active substances, fifteen (15) in the radium group and eleven (11) in the thorium group, any of which may be recognized by: 1, their effect on sensitive photographic plates; 2, their ability to produce flourescence; 3, their ability to ionize air, and 4, their production of heat. From all these substances there is an emission of rays, from which their therapeutic value is derived. These are classified according to their physical properties into alpha, beta and gamma rays. Of the three types the alpha particles are the least penetrating, being completely stopped by a thin sheet of paper and not being detectable after passing through three inches of air. They are positively charged minute particles the size of atoms, the action of which we see in a spinthariscope, a screen of zinc sulphid in front of which there is a small fragment of radium, so small it cannot be seen with the naked eye. From a gram of pure radium bromid it is estimated that twenty thousand millions of these particles are expelled per second with a velocity of approximately one-tenth that of light. The beta rays are negatively charged electrons, smaller than the alpha, and travel with a velocity of one hundred seventy thousand miles per second. Their penetrating power is therefore much greater than that of the alpha articles, it requiring a piece of lead 2 m.m. in thickness to intercept them. They will penetrate several centimeters of tissue. The gamma rays are ether vibrations rather than particulate, as are the alpha and beta rays. They have a much shorter wave length than visible light and their penetrating power is extraordinary. Even the interposition of a human body does not deflect or intercept them. In the therapeutic application of the rays, because of these properties it is possible to use them all together or separate them, as may be desired. In so doing, we take into consideration their power of penetration and magnetic deflection. The alpha rays being positive particles and the beta rays negative particles, we are able to deflect them by means of the electro-magnet. The alpha rays are deflected in one direction, the beta in an opposite, and the gamma not at all, as shown in the diagram below.

In the treatment of disease this method would hardly be practical, and, to say the

*Read before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2, 3, 4, 1916.

least, would be somewhat complicated. The usual means of separating the rays, however, is quite simple. If the salt of radium is enclosed in a glass tube the rays are produced in the same manner as when the salt is exposed to the air, the rays passing through the walls in radial lines, thus producing a sphere of radiation. The walls of the tube intercept the alpra rays, and if it be further surrounded by a screen of as much as 2 m.m. of lead, the beta rays are intercepted. The gamma rays pass through unaltered, and it is therefore possible to use a combination of all the rays, the beta and gamma rays together, or the gamma rays alone. In using these rays in the treatment of diseased conditions it is the aim to get the same intensity radiation in the depths as in the superficial strata. This fact alone reveals the necessity of having at least a limited knowledge of the physical properties of the substance under consideration before an intelligent understanding of its application can be had. Since the rays are given off from a point in every direction, their intensity will vary inversely with the square of the distance. If, for example, we take a tube containing a given amount of radium and place it one m.m. from a given surface for one minute, we get a unit dose on that surface. Now, if this tube be moved 25 m.m. from the given surface under the same conditions, the surface will receive only one-625th of a unit of radiation, or it may be said that a unit radiation may be obtained in one minute at one m.m. or 625 minutes at 25 m.m. In a way this is an objectionable feature. For example, in obtaining a unit dosage at a point two and one-half centimeters beneath the skin with the tube one m.m. distant, the surface is receiving 625 times the intensity that the point is receiving; however, this objection can be overcome (1) by increasing the distance between the surface and the tube and the depth dosage brought nearer and nearer to that of the surface, or (2) by the insertion of needles containing fine capillary glass tubes of the emanation in different portions of the tumor. In this connection we might state that with a gram of radium one may obtain an intensity in 12 seconds that with 200 mgs. may be obtained in one minute. This ratio is true of any quantity of radium element within certain limits; however, it does not hold true with very small quantities; in fact, it is generally conceded that radium in small quantities is more apt to stimulate cell activity than retard or destroy it. Of late, however, more encouragement has been given out for smaller doses more often repeated than ever before. From an experimental standpoint, probably the most interesting work has been that of Wood and Prime on the biological action of radium, using animal tumors as an index of the lethal effect[4]. Their results show that at a distance of approximately one m.m. 100 mgs. of radium will kill tumor cells in vitro in forty-five minutes, 83 mgs. in one hour, 30 mgs. in one and one-half hours, 20 mgs. in two and one-half hours, 17 mgs. in three hours, and 10 mgs. in five hours.

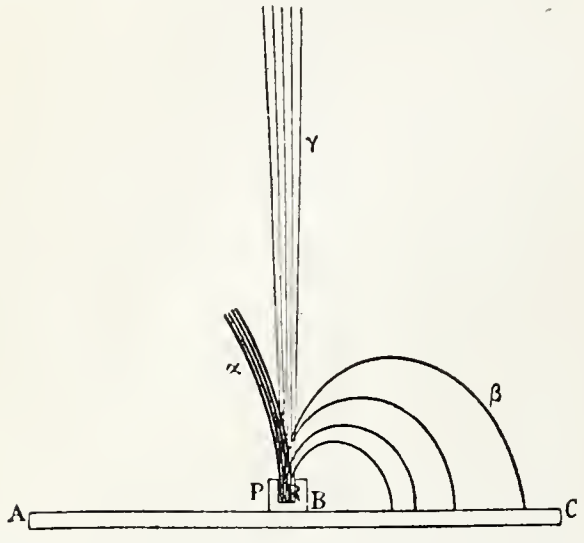


Diagram taken from Mme. Curie's thesis of 1903, illustrating the manner in which the alpha and beta rays are deviated by a powerful electromagnet.

General Action.—When the rays from radium strike a substance, this substance becomes the source of secondary rays, the so-called rays of Sagnac, which are similar to the primary beta rays that are emitted from the radium. The intensity of these secondary rays will depend upon the density of the metal or substance used. It is not an uncommon thing to hear the statement that radium acts as a cautery, and, judging from conversations with the laity, the idea seems to be prevalent that radium cures a cancer by burning it out. Nothing can be further from the actual fact. Radium is said to be possessed of a selective destructive action, and a general destructive action. The selective destructive action is advocated because of the fact that a tumor is very often seen to disappear from beneath the skin, after the use of radium, without any apparent effect upon the tissues. As a matter of fact, there is a marked selective tendency in this direction, and as-

suming that radiation has a deleterious effect upon all tissues, this selective action may be explained in the following manner, which, to the writer, seems to be the most plausable theory concerning the effect of the rays on normal and pathological tissue. First, although the radium produces a certain deleterious effect on all living tissues, the fluids and protective agencies of the body are all constructed to help the normal, and, though weakened, the normal cells do not die. Second, the pathological tissues are weakened to the same extent as the normal, but since the body fluids and normal protective agencies are not constructed to aid in the upkeep of these pathological cells, they disappear. In the explanation of the action of the rays in this manner certain other facts well known to those familiar with the use of radium can be explained. First and foremost, the fact that under identical circumstances as regards dosage and application and identical conditions as regards the patient, we occasionally fail to get a result in one, while in the other the sensitiveness of the tumor is most remarkable. For this reason we are unable to state beforehand the amount of benefit the patient is to derive from the treatment. I have seen cases that were apparently absolutely hopeless whose conditions yielded in a way that seems almost magical. I remember one case in particular, a case of carcinoma primary in the tonsil that was declined treatment when first seen because of the extensiveness of the condition that later, after agreeing to an experimental treatment, yielded a result almost unparallelled. But since the advent of the use of large quantities of radium, these cases are more common today. In fact, one writer, Bumm, goes so far as to say that he believes eventually cancer will be treated alone by actino-therapy. Another fact concerning the selective action of the rays and the body's resistance is that tuberculous glandular involvements disappear under radiation, while tubercle bacilli growing in culture in the test tube are unaffected by its rays.

Histological Action.—It is a deplorable fact, well known to you all, that in the beginning of any undertaking a certain amount of experimental work must be done, for without experimentation our science would of necessity remain at a standstill. During this experimental stage a certain amount of unpleasant things may happen. In the beginning of the use of the *x*-rays we often heard of their deleterious effects, more on the operator, because of continued exposure, than upon the patient. In the case of radium such has been the reverse, more because of the fact that the operator has remained silent and the patient has spoken. I have seen the fingers of more than one operator swell, turn red, crack, and the nails come off, but it was not until a few weeks ago that I saw an article[5] treating of the occupational effects due to radium. Today we hear very little of the undesirable effects of either the *x*-ray or radium. This is due to the fact that the *x*-ray operator has learned to protect himself and the radium operator to protect his patients. This statement is true, yet by the uninformed unaccepted. In the case of radium, until the present we might say ignorance is excusable, yet "*ignorantia legis neminem excusat.*" It is possible to produce burns with radium just as it is possible to produce burns with the *x*-rays. These can, however, and are, to be avoided in one place; in another they are to be sought. For example, in cases of superficial epitheliomata a result can be brought about much quicker by a destructive action and at the same time the patient not greatly inconvenienced. When burns are necessary they may be produced in one of four degrees: 1, erythema; 2, erythema with desquamation; 3, vesication with superficial ulceration, and 4, deep ulceration. When treated with radium all tissues react in some manner, the reaction depending upon: 1, apparatus, screening and dosage employed: 2, nature and condition of tissue treated; 3, extent of application, and 4, personal idiosyncrasy. The reaction, when noted, may appear in from one to four weeks, usually about ten days. After prolonged applications certain constitutional manifestations may be noted, fortunately all of a very slight degree, appearing in about four days and passing off in the course of forty-eight to seventy-two hours. While connected with the Howard A. Kelly Hospital in Baltimore, the writer prepared a chart for recording these so-called constitutional manifestations, but up to this time I have not seen a statistical report of these conditions. In the ordinary run of cases the reaction is usually characterized by an increased hyperemia of the skin in about ten days, followed by a shedding of the epidermis and the formation of a blister. This leads to the formation of an ulcer under a crust in about twenty days. In four or five weeks the scab comes off, leaving a cicatrix which is depig-

mented, hairless, smooth and supple. Microscopically the guinea pig's skin which has been irradiated to a slight degree, shows at the end of ten days the epithelial cells of the epidermis to be hypertrophied and edematous. At the end of twenty days the hair follicles, sweat and sebaceous glands have degenerated and there is a shedding of the epidermis. The latter is reformed in thirty to forty days, but the hair follicles, sweat and sebaceous glands do not reappear. In the dermis at the end of thirty days a marked congestion is observed and the cells show a tendency to revert to an embryonic form, but in due time return to the normal state. As was said above, different tissues vary in susceptibility and the well-known law, "The more highly specialized the tissue, the more easily destroyed," does not hold good with radium. The eye is the most resistant part of the body and the ovary shows particular susceptibility. Brain and nerve tissue are very resistant. The reaction noted in carcinoma of the cervix, for example, is somewhat different from that seen in the skin. In three or four days there is a tendency for the nuclei of the cells to swell and the protoplasm to become vacuolated; at the end of two weeks many of the cells are disintegrating; at the end of four weeks all carcinoma cells have disappeared and in their place a new connective tissue formed; at the end of several months there is a great deal of connective tissue and a marked vascularity of the part.

THERAPEUTIC VALUE. — Before discussing the therapeutic value of any substance intelligently, we must of necessity know something of the mode of administration. Radium, unlike other substances, when introduced into the system does not always act in the same manner regardless of the time elapsing after the administration. Radium may be introduced into the body in solution, by mouth, by subcutaneous injection, by intravenous injection, or by the application of tubes either inside or outside the body, and its action varies with the method of introduction.

INHALATION.—In so far as the therapeutic value of the inhalation of the emanation is concerned, I can only quote the literature. Not a great deal has been done in this country along this line, the principal work being carried on in foreign countries; however, the institution of emanatoriums is being advocated for the treatment of such conditions as it may be indicated in. There seems to be no question but what decided benefit is to be derived from the internal administration of radium in gout, rheumatic disorders, arthritis, neuralgia, etc., and in this form of administration it has a marked effect upon the hemapoetic tissues, in small doses stimulating and in large doses destroying them. By means of intravenous injections we are able to reduce the blood pressure. But at this time we shall deal principally with the local application of radium. Radium has been proven to be of value in many conditions, and to discuss them in detail would take more time than it is possible to give at this writing.

CARCINOMATA. — Basel-celled epithelioma. Ordinarily this condition is considered the most amenable to radium therapy. Practically all are healed. The case history given below is typical.

Case 1. Mr. J. F. F., age fifty, male, white, widower, laborer. Complaint: Referred from Folsom Clinic by Dr. A. C. Shipp with a diagnosis of epithelioma. Family history: Father died of cancer, which began in the same manner and location as that of patient's. Otherwise negative. Past personal history: General health as a rule has been good. Usual diseases of childhood. No complications. No sequelae. Good recoveries. Had pneumonia in December, 1915. Good recovery. Otherwise negative. Head, eyes, ears, nose, mouth, teeth and throat negative. Cardio-respiratory system negative. Gastro-intestinal system negative. Nervous and neuro-muscular system negative. Present illness: Has always had a mole on the left side of the nose near the inner canthus of the eye. Along the latter part of December, 1915, the mole began to enlarge and some soreness was noted about the bridge of the nose. It was not long until when anything would touch it, it would bleed. When drying the face, if the towel touched it, it would bleed freely. Because of the fact that the patient's father died of a cancer in this location, he became alarmed and sought medical advise at the Folsom Clinics. There he was seen by Dr. Shipp, state pathologist, and referred to me for advice concerning radium treatment. Examination revealed a basel-celled epithelioma on the left side of the nose, 12 m.m. ($\frac{1}{2}$ in.) in diameter with an elevation of 6 m.m. ($\frac{1}{4}$ in.). The center was slightly depressed and bled easily. Over the raw surface a scab would frequently form, but soon

came off. This case was reported in a paper read before the First District Medical Society, Jonesboro, April 25, 1916.

Squamous-celled epithelioma: This type of growth also gives splendid results when located where a sufficient intensity dosage may be obtained; however, a greater amount of raying is necessary before an improvement is noted. Where there is a good deal of thickening of the edges, a result may be obtained quicker by curetting, the application being made shortly afterward. Simpson[6] reports forty cases of epithelioma of the skin, thirty-eight of which were apparently cured, the two remaining having failed to return for a second treatment.

Epithelioma of the lip: The results in the treatment of this condition have been very satisfactory. Some writers[7] advocate it as the method of election when the ulceration is superficial and the lesion is freely moveable on the underlying tissues.

Carcinoma of the breast: Because of the present high percentage of cures following operation for cancer in this location, not a great deal has been done with this condition in the way of ray therapy. There are several successful case reports in primary cancer of the breast, and recurrent nodules as a rule yield in a gratifying way.

Carcinoma of the uterus: Previous to the advent of radium, the best statistics were those of Wertheim[8], who reports 50 per cent of cures from the radical operation called after his name. The next in order are those of Kelly with 25 per cent, and third, those of Kronig[9] with 20 per cent of cures. In an article on radium in the treatment of carcinoma of the uterus, by Kelly and Burnam[10], the statement is made that at this time they are able to cure one out of four cases of inoperable cancers of the cervix, and by the joint use of radium and surgery in operable cases the cure rate may be raised from one in four to three in four and better. Schauta reports eleven clinical cures in twenty-two inoperable cancers of the uterus. Wertheim six out of eighteen and others in proportion. In cancer of the uterus, radium may be employed in inoperable cases in the hope of rendering them operable or for the relief of pain, discharge, etc. In operable cases where operation is contraindicated, or as a post-operative measure for the prevention of recurrences. Gauss[11] reports twenty-one cases that were rayed after operation. Twenty have remained free of recurrence up to six years after operation, while the usual percentage of recurrence after operation without radiologic treatment is sixty within the first year.

Uterine hemorrhage, whether due to ovarian disturbance, metropathies, or fibroids, may be controlled by the introduction of as many as fifty milligrams of radium element into the uterine cavity for a period of four to eight hours. With as much as three hundred milligrams radium element, a complete amenorrhea may be produced after an intrauterine application of three hours.

Fibroids: According to Burnam, 95 per cent of uncomplicated uterine fibroids, regardless of the size or position, may be reduced to an insignificant size. The remaining 5 per cent are either calcified "or the patient lacks the necessary solvents in her blood." If one desires to operate fibroids, an anemic poor risk may be made a good one by a preliminary radiation of resulting amenorrhea. The time of disappearance of the tumor varies from two to eight months, but as a rule only one radiation is necessary if sufficient amount of radium is used. "Some disappear without any effect on the periodic, normal recurrence of menstruation.

In dermatology, radium is indicated in the treatment of warts and papillomata which yield readily to comparatively short exposures.

Acne vulgaris and acne keloid, "particularly when associated with scarring, respond well to radium rays."

Keloid, especially when met with after severe burns, yield in a way that would indicate almost a specific action of the rays.

Lupus erythematosus: To date I have treated one case which yielded a very gratifying result.

Pruritis: In treating this condition, radium exercises almost a specific analgesic action. One of my associates was lately relieved of pruritis of the anus in one application.

Angiomata do exceedingly well under radium treatment, and in this field radium supersedes any other known method.

Conclusions.—It is not desired that this paper impart the idea that radium is to supersede surgery.

Radium has great and positive value in the treatment of malignant disease both prior and subsequent to operation.

Radium is the method of choice in the treatment of certain malignant conditions.

By its use, combined with operation, operative statistics may be favorably influenced.

It may be used in inoperable cancers to minimize suffering and prolong life.

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A traveling man who was very fond of his wife (such usually are) daily wired her his doings. Every berth on the sleepers was occupied, and an old lady was left to spend the long and weary night in a chair unless some gallant knight of the road saw fit to yield up his couch, and this our hero did. The next day he wired his wife: "Gave berth to an old lady last night; am all in today." Do you wonder?—Bucks County (Pa.) Medical Monthly.

The man succeeding, the man that is climbing higher, the man who enjoys a remunerative practice, is always found to be the man who is active in his local state and national organization. He attends their meetings, finds time to read several medical journals of known worth, and also takes time out to attend clinics. To emulate that example is a long step forward on the road to success.—Journal of the Medical Society of New Jersey.

SOME PRACTICAL NOTES ON BLOOD PRESSURE.

Dr. Dearborn, in the Medical Record, calls attention to startling variations in the blood pressure taken at minute or two-minute intervals in all normal individuals. He logically claims that an accurate blood pressure determination is an half hour procedure taking readings every minute or two.

The author enumerates twenty specific influences which may vary the reading. Among those that invariably play a part are: the muscle tonus of the arm, the degree of tonus of the arterial wall, the varying shape of the arterial cross-section at any moment, previous exercise, the emotional state, and even mental activity.

The author does not attach any sinister significance to a low blood pressure any more than to a slow pulse.

(The author's article further emphasizes the necessity of taking several blood-pressure readings on the same and different days. The examiner should endeavor to establish a standard for all readings as to position, previous rest or activity, both physical and mental, etc., a standard not requiring certainly an half hour for repeated readings at one-minute intervals.)—Journal of the Medical Society of New Jersey.

The greatest vitalizing agency in existence is the plunge into cold water, followed by vigorous slapping and rubbing.

It costs the United States $165,000,000 to feed its rats. The only remedy is rat-proof building.

As a cold is usually an autotoxemia, catharsis and starvation readily suggest themselves. —Medical Summary.

Cactus, used to influence the heart-muscles and stimulate the heart and respiratory nerves, is reliable and effective.—W. W. Swartz, Medical Summary.

A gain in weight in a series of cases has been alleged for nearly every discarded system of treating tuberculosis.—A. L. Benedict, N. Y. M. J.

Very few cases of hyperchlorhydria are of ulcer; and very few cases of demonstrated ulcer go on to gastric cancer.—A. L. Benedict, N. Y. M. J.

Tetanus: Gibson (A. J. Med. Sci.) finds the phenol treatment gives the best results—17 per cent mortality. Magnesium is dangerous by paralyzing respiration. Antitoxin should begin with the first suspicion of tetanus. Atropin to control spasms.

—The Medical World.

THE JOURNAL
OF THE
Arkansas Medical Society

Owned and controlled by the Arkansas Medical Society and published under the direction of the Council.

DR. WILLIAM R. BATHURST, EDITOR

PUBLISHED MONTHLY. Price, $1.00 a Year in Advance. Single Copies, 25 Cents.

Entered as second-class matter, June 21, 1906, at the post-office at Little Rock, Arkansas, under Act of Congress of March 3, 1879.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

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The Journal of the Arkansas Medical Society,
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Little Rock, Ark.

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Editorials.

THE MAY MEETING AND THE SCIENTIFIC PROGRAM.

As we stated last month in The Journal, the May meeting this year will be an Arkansas talent affair throughout. Visitors from other states will, of course, be welcome, but every paper will be contributed by members of the Arkansas Medical Society. The responses to the request of the Program Committee were prompt, but the program is not yet filled and the committee needs a few more papers. We know there is plenty of high-class talent in Arkansas and the very fact that this year, for the first time in many years, no foreign talent will be invited to send papers, is all the better reason why every member should put his shoulder to the wheel and help make the meeting this year the very best and most interesting on record. It can be done by united effort. As this will be next to the last issue before the annual meeting, all who desire to contribute papers should communicate at once with the Program Committee, or the secretary, Dr. C. P. Meriwether.

The meetings will be held in the old statehouse. The scientific session will be held on the second floor and the House of Delegates in one of the lecture rooms on the first floor. Ample room will be provided for the commercial exhibit. The Entertainment Committee has arranged an excellent social program, but it is not ready to announce it in detail. It will, of course, include special features for the ladies. The complete program will be published in the April number of The Journal. This is an added reason why those contributing papers should write at once. If the paper is not completed, the title can be given so that it can be included in the program, which must soon be sent to the printer.

COMMITTEE REPORTS NOW DUE.

We want to call attention to a very important matter which demands prompt attention. At the Texarkana meeting in May last, Dr. Caldwell submitted a resolution requiring the chairman of each standing and special committee to furnish the secretary of the State Society with the committee's report one month before the annual meeting. A section requiring the secretary to send a copy of each report to every member two weeks before the convention was not approved by the Reference Committee, which recommended that the reports, instead, be published in the April number of The Journal.

The special attention of all chairmen of committees is called to this fact: Work on the April number will be commenced as soon as this, the March, number is off the press, and perhaps earlier.

It is absolutely essential that the reports reach the state secretary by April 1 at the latest. He will at once turn them over to the editor of The Journal for publication. When this matter was up for discussion at the last annual meeting, Dr. L. Kirby made the point that the Committee on Necrology would not be able to make a complete report a month before the annual meeting. That is technically true, because some death might occur in the interim. But he can make a report to April 1 and we can sincerely hope that it will be a final report. If otherwise, a brief supplementary report can be made later.

The importance of this whole matter will be seen by referring to the remarks of Dr. Caldwell at the time he introduced the resolution, which was prefaced with the statement that experience had demonstrated that many matters of importance to the medical profession had not received proper consideration because of the unbusiness-like way in which the

reports were handled. It was to enable an intelligent discussion of the reports that Dr. Caldwell introduced the resolution. Unless the reports are promptly sent to the secretary, the whole aim of the resolution will be defeated.

PLEASE SEND YOUR REPORTS BEFORE APRIL 1.

Abstracts.

URINATION IN WOMEN.—H. G. Bugbee, New York (Journal A. M. A., March 3, 1917), has gathered the statistics as to the frequency of urination in 1,000 women and girls who have come under his observation in hospital and private practice, and finds that increased frequency is one of the most common symptoms of disorder of the urinary organs. The figures would probably be much higher were the data more complete, since, considering all the conditions, it is to see that frequency of urination in women is by no means dependent on lesions primary in the bladder. He has tabulated his findings for each decade from infancy to old age and sums up his conclusions substantially as follows. Lesions of the urinary system in women are primarily concomitant complication or sequel of the sexual and child-bearing functions and secondarily of the sedentary life. During the early-age periods frequent urination is associated with acute infections more commonly than in later life, which infections, in a large proportion of cases, are localized in the urethra and trigon, and if not cured go on to stricture. Tuberculosis is not found in the first decade of life nor in the last four decades. Intermittent attacks of vesical irritability are common, accompanying colon bacillus pyelonephritis. The relatively common frequent urination after post-operative catheterization forces the conclusion that this procedure, as commonly practiced, calls for radical improvement in technic and instruments employed. Calculi are comparatively common in the ureter in young adults, in the kidney and bladder in older ones, in the former with colic attacks, in the latter with mild symptoms or those of the accompanying infection. More calculi are being removed or assisted in their passage. Prolapsed kidney is a predisposing factor in kidney lesions. The findings as to the occurrence of cancer agree with the accepted views. The frequency of cystocele in middle-aged women suggests that it, with its residual urine subject to infection, may be the analogue of the enlarged prostate, with its urinary disturbances, in the male.

PYELITIS IN CHILDREN.—W. C. Quinby, Baltimore (Journal A. M. A., February 24, 1917), mentions the disagreement that exists as to the origin of pyelitis in children. The most common type is that due to bacilli of the colon-aerogenes group. The three methods by which the infecting organism can reach the renal cavity are by direct extension from below, by the general blood stream, and by way of the lymphatics. The first of these has held the field as most plausible and common, but latterly it has been disputed, since it has never been clearly proved, and in some cases it can be demonstrated to be incorrect. It is probable that the frequency of this mode of ingress has been exaggerated. There still remains, however, the well-known fact of the large preponderance of girls afflicted over boys. This has been explained by closer proximity of the female bladder to the exterior, with increased chances of infection from the anus. The burden of proof against this possibility is on those who dispute ascending infection, but their proof has not yet been given. The English school of pediatricians advocate keeping the urine alkaline by giving potassium citrate. Others prefer to make the urine acid by sodium benzoate, while still others advocate alteration of these drugs. Some writers are warm advocates of hexamethylenamin. Use of vaccines has been generally disappointing, but the majority opinion seems to favor the use of alkalies. With these discrepancies in the methods and results of treatment, Quinby says that much must depend on the nature of the infecting organism, and it is easy to see that in one case certain treatment might succeed and fail in others. We should endeavor to regulate the urinary reaction either by citrate or benzoate as the case may be, so that it will be as far as possible outside the range of hydrogen ion contraction by the infecting organisms. Cultures from urine should be grown on the special mediums used by Clark and Lubs, and similar observations be made on the urine, and comparison of these will indicate the treatment. It is Quinby's opinion that this method, based on accurate knowledge of the biologic characteristics of the infecting organism, will afford

an increased number of cures. Of course, some cases cannot be thus controlled. Some will be found with chronic infection, symptomless, but still diseased. He would advocate for such cases injection of silver nitrate solution into the kidney pelvis, strong enough to produce a moderately sharp reaction. The marked and quick benefit of such treatment is well known, but it has not been applied to young children. He thinks that it could be applied at least in female children. Pediatricians and internists have not yet appreciated the value and possibilities of pelvic injections.

SYPHILIS.—The advantages of Hecht-Weinberg-Gradwohl modification of the Wassermann reaction for syphilis are pointed out by R. B. H. Gradwohl, St. Louis (Journal A. M. A., February 17, 1917). While a positive Wassermann is most valuable as a positive evidence of syphilis in the system, a negative test is by no means satisfactory as excluding it. His own experience of nine years, he thinks, entitles him to estimate that a negative finding in cases of clinical syphilis is possible in 40 per cent of the cases. He believes that this is partly due to the technic in the original Wassermann method, and partly to a temporary or permanent disappearance of the reaction in certain cases or at certain stages of the disease. He says this advisedly because he has been able to add 15 per cent to the column of positives by utilizing another test which eliminates certain faults of technic. He has not been able to add much to the per cent of positives by eliminating faults due to factors inherent in the idiosyncratic factors of the patient or disease or unknown factors that make his blood and the spinal fluid consistently negative at certain times and under certain conditions. He does not include in the latter statement, however, his use of the provocative method of producing positives by means of arsenobenzol injections. Certain elements in the method proposed by Hecht and Weinberg recommended it to him four years ago, such as the use of unheated serums, etc. The heating of blood serums for the purpose of destroying complement unquestionably also destroys part of the syphilitic antibody or substance responsible for complement fixation. An explanation of this may be found in the claim that there are two kinds of syphilitic antibody, one thermolabile, the other not, and in some cases the one predominates over the other in the blood. It must be remembered also that the Wassermann technic does not take into account the presence in man of natural antisheep amboceptor which is supposed to depend on the ingestion of mutton, and this may impair the accuracy of the test. The Hecht-Weinberg method was introduced to him in Paris. It obviously has much to recommend it, in that it utilizes unheated serums and takes into account the presence of natural amboceptor and natural complement. After working out this method, he determined on the expedient of estimating the exact amount of complement and amboceptor present in each and utilized only the exact amount of sheep corpuscles hemolyzable by that much amboceptor and complement. He reproduces here his description of the modification of the method published in The Journal of the A. M. A., July 18, 1914, p. 240. He says that it has never been found negative in any blood serum showing a positive Wassermann, but it has frequently been found positive in serums that show a negative Wassermann. There are still certain cases of syphilis in which both tests are negative, in which the clinical symptoms and later positive reactions fix the diagnosis. These are invariably cases of latent syphilis in robust individuals. He also adds that the use of cholesterinized antigens does not measure up in accuracy to the use of the Hecht-Weinberg-Gradwohl test as a serologic test for syphilis. He quotes a number of case histories from the practice of himself and colleagues showing the types in which the positive Hecht-Weinberg-Gradwohl reaction can be obtained after a negative Wassermann. He includes the following: 1. Cases of ocular syphilis. 2. Cases of visceral syphilis, particularly of the liver and heart. 3. Cases of syphilis that have received intensive but inadequate treatment. 4. Provocative cases in which we are seeking to revive a Wassermann in suspected cases. 5. Cases of monosymptomatic tertiaries. He thinks there is no better check or control of the Wassermann than this test in every blood submitted for examination, and it should take precedence by virtue of its greater accuracy. He does not recommend it, therefore, simply as a control, but as a far better test, except in the 2 per cent of cases that have no hemolytic index. No negative Wassermann is worth while unless backed up by a negative Hecht-Weinberg-Gradwohl. When both are negative, which occurs in 25 per cent, according to statistics, recourse

should be had to still other methods of the clinic and the laboratory for the inclusion or exclusion of any remaining trace of the disease.

Personals and News Items.

Dr. C. L. Vines has moved from Crossett to Stevenson, La.

Dr. C. H. Morris of Vian, Okla., visited in Little Rock last month.

Dr. J. L. Smiley, Siloam Springs, is in Chicago attending Dr. A. J. Ochsner's clinics.

Dr. Ernest W. Prothro has returned from New York and opened offices at 313-314 Boyle Building, Little Rock.

Dr. and Mrs. H. A. Higgins, Little Rock, have returned from an extended visit in Mississippi and Louisiana.

Dr. A. W. Strauss and Dr. T. M. Fly, Little Rock, attended the Charity Hospital Clinics in New Orleans last month.

Dr. and Mrs. P. A. Riddler, Fort Smith, announce the birth of a son, John Garth, February 23, 1917. (Congratulations, Percy.)

Mr. and Mrs. Max Frohlich of Lonoke announce the marriage of their daughter, Rosalie, to Dr. George Evans Tucker, March 7. They will be at home after March 20, Bigelow, Ark.

F. S. Betz Company, Hammond, Ind., have issued a new illustrated hospital catalog. A copy to those interested may be had on request.

The American Medical Association will meet in New York City during the week beginning Monday, June 4, with headquarters at the Astor House.

COMMERCIAL EXHIBIT.—Arrangements for space for a commercial exhibit during the meeting of the State Medical Society, Little Rock, May 1, 2, 3, may be had by applying to Dr. E. N. Davis, chairman, Boyle Building, Little Rock.

"Health Insurance and the Medical Profession" is the title of a paper by Alexander Lambert, M. D., New York, published in The Journal of the American Medical Association for January 27. Every physician should read it as a matter of general information.

Dr. S. E. Thompson, who recently resigned as assistant superintendent of the State Tubercular Hospital of Texas, has moved to Kerrville, Tex., to accept a position as superintendent and medical director of the Mountain Park Sanatorium, a private institution for the treatment of tuberculosis.

Dr. J. P. Sheppard, who during the past nine years has been in charge of the Pulaski County Hospital, Little Rock, has become associated with Drs. Runyan and Kirby, under the firm name of Drs. Runyan, Kirby & Sheppard. Contracts have been let for a second story to St. Luke's Hospital, and when completed they will be able to take care of fifty patients.

County Health Officer, Dr. H. H. Niehuss, El Dorado, has named the first week in April as Health Week. The movement has been endorsed by the city health officers of El Dorado, Huttig, Junction City and Wesson, and by the Union County Medical Society. The physicians throughout the county will give their services for the medical inspection of all school children in the county.

Physicians visiting in Little Rock during the past month include: E. T. Bramlitt, Malvern; T. J. Stout, Brinkley; M. C. Hughey, Rector; W. D. Hodges, Malvern; C. H. Cargile, Bentonville; F. C. McGuire, Gregory; John F. England, England; L. D. Robertson, Leslie; B. D. Luck, Pine Bluff; Wm. Breathwit, Pine Bluff; C. A. Archer, DeQueen; D. W. Goldstein, Fort Smith; J. P. Bremer, Point Cedar; G. A. Warren, Black Rock; T. J. Pool, Blue Ball.

HOSPITAL FOR EL DORADO — COMPANY ORGANIZED AND COMMITTEE TO BUY EQUIPMENT.

The El Dorado Hospital Company was organized yesterday afternoon. The property of Judge E. O. Mahoney has been leased and will be converted into a hospital. The directors are: Dr. L. L. Purifoy, Dr. F. O. Mahoney, Dr. J. A. Moore, L. K. McKinney and J. H. Alphin. The following officers have been elected: President, Dr. F. O. Mahoney; vice president, Dr. J. A. Moore; secretary and treasurer, Dr. L. L. Purifoy. A committee of J. H. Alphin, Dr. J. A. Moore and Dr. L. L. Purifoy has been appointed to purchase furniture and equipment and the hospital will be opened by April 1.—Arkansas Gazette.

NATIONAL BOARD OF MEDICAL EXAMINERS.

The second examination to be given by the National Board of Medical Examiners will be held in Washington, D. C., June 13, 1917. The examination will last about one week.

The following states will recognize the certificate of the National Board: Colorado, Delaware, Idaho, Iowa, Kentucky, Maryland, North Carolina, New Hampshire, North Dakota and Pennsylvania. Favorable legislation is now pending in twelve of the remaining states.

A successful applicant may enter the Reserve Corps of either the army or navy without further professional examination, if their examination papers are satisfactory to a Board of Examiners of these services.

The certificate of the National Board will be accepted as qualification for admittance into the Graduate School of the University of Minnesota, including the Mayo Foundation.

Application blanks and further information may be obtained from the secretary, Dr. J. S. Rodman, 2106 Walnut Street, Philadelphia.

New and Nonofficial Remedies.

Theobromin-Merck.—A brand complying with the standards for theomobrin—N. N. R. Merck & Co., New York.

Tabellae Dulces Tannalbin (Western), 1 Gr.—Each tablet contains tannalbin 1 gr. with cocoa, sugar and saccharine as vehicles.

Formin Tablets, 5 Grs.—Each tablet containse 5 grs. of formin (see New and Nonofficial Remedies, 1916, p. 138). Merck & Co., New York.

Formin Tablets, 7½ Grs.—Each tablet contains 5 grs. of formin (see New and Nonofficial Remedies, 1916, p. 138). Merck & Co., New York.

Tabellae Dulces Tannalbin (Western), ¼ Gr.—Each tablet contains novaspirin ¼ gr. with sugar, starch, liquid petrolatum, saccharine, curcuma and oil of lemon as vehicles.

Veronal Tablets, 5 Grs.—Each tablet contains 5 grs. of veronal (see New and Nonofficial Remedies, 1916, p. 92). Merck & Co., New York (Journal A. M. A., January 6, 1917, p. 35).

Urease-Squibb.—A standardized preparation of urease obtained from the jack bean. It is supplied in the form of powder and tablets containing 0.1 gm. E. R. Squibb & Sons, New York.

Barium Sulphate, P. W. R. for X-Ray Diagnosis.—A brand complying with the standards for barium sulphate for Roentgenary work—N. N. R. Powers-Weightman-Rosengarten Co., Philadelphia.

Barium Sulphate, Merck, for X-Ray Diagnosis.—A brand complying with the standards for barium sulphate for Roentgenary work—N. N. R. Merck & Co., New York (Journal A. M. A., January 13, 1917, p. 121).

Tabellae Dulces Novaspirin (Western), 1 Gr.—Each tablet contains aristochin 1 gr. with cocoa, sugar and saccharine as vehicles.

Tabellae Dulces Heroin (Western), 1-100 Gr.—Each tablet contains heroin 1-100 gr. with cocoa, sugar and saccharine as vehicles.

Acetylsalicylic Acid.—Acidum Acetylsalicylicum.—Aspirin.—The acetyl derivative of salicylic acid. Dosage: 0.3 to 1.0 gm., repeated once in three hours until symptoms of salicylism are noted. It may be dispensed as powders (in wax paper), wafers or capsules.

Tabellae Dulces Terpin Hydrate with Heroin (Western), 1-100 Gr.—Each tablet contains terpin hydrate ½ gr., and heroin 1-100 grain, with cocoa, sugar and saccharine as vehicles. Western Chemical Company, Hutchinson, Minn. Accepted for the Appendix to New and Nonofficial Remedies (Journal A. M. A., February 10, 1917, p. 461).

Urease.—An enzyme found in certain beans, fungi and micro-organisms which, in the presence of water, converts urea into ammonium carbonate. It is used in the determination of urea in the urine, blood and other body fluids, either by determining the increase in alkalinity of the fluid to which it is added, or else the ammonia produced by it in the fluid is removed and estimated.

Iocamfen.—A liquid obtained by the interaction of iodin 10 parts, phenol 20 parts, and camphor 70 parts, containing about 7.25 per cent free iodin. Iocamfen is said to have the antiseptic and germicidal properties of iodin and also the analgesic, stimulating and antiphlogistic properties of camphor and phenol. It is used in dressing wounds, etc. Iocamfen is also supplied as Iocamfen Ampules, con-

taining 20 minims ioeamfen. Schering & Glatz, New York (Journal A. M. A., January 20, 1917, p. 199).

NEUTRAL SOLUTION OF CHLORINATED SODA. —SOLUTION CHLORINATED SODA, DAKIN.—SOLUTION CHLORINATED SODA, CARREL-DAKIN.—A chlorinated soda solution eontaining 0.43 to 0.48 per cent of available chlorin, free from caustic alkali. It is prepared by treating a suspension of chlorinated lime in water with definite amounts of sodium carbonate and sodium biearbonate and adjusting the separated clear liquid to the required content of available ehlorin. The solution is not reddened by phenolphthalein. It must be protected from light. The solution has been used for the irrigation of wounds, especially infected war wounds.

Propaganda for Reform.

THE WILLARD PYORRHEA TREATMENT.—After defrauding the public of amounts estimated by the federal investigators at $75,000.00 a year by means of a fake cure for pyorrhea, F. W. Willard, M. D., D. D. S., has been denied the use of the United States mails. The business of the Willard concern, apparently owned by Oren O'Neal, consisted of a mail-order plan of a so-called home treatment for pyorrhea or Riggs' disease (Journal A. M. A., February 10, 1917, p. 477).

SARGOL.—The case of the United States against Wylie B. Jones and H. E. Woodward, proprietors of "Sargol," came to an end January 30, 1917, after a trial lasting thirteen weeks. Jones was fined $20,000.00 and Woodward was fined $10,000.00. Sargol was a nostrum of the get-fat-quick variety; as an alleged "flesh builder" it was advertised extensively and intensively by its exploiters (Journal A. M. A., February 3, 1917, p. 381; February 10, 1917, p. 468; February 24, 1917, p. 642).

FIRWEIN.—The Council on Pharmacy and Chemistry reports that Firwein (The Tilden Company) is sold under the claim that when swallowed it has a "predilection" both for the bronchial mucosa and also for the genito-urinary organs. The Council finds that little information is given in regard to the composition of Firwein. As the composition of Firwein is secret, the therapeutic claims unwarranted and its use irrational, the Council declared it inadmissible to New and Nonofficial Remedies (Journal A. M. A., February 17, 1917, p. 564).

THE PHENOLSULPHONEPHTHALEIN TEST.—It has been assumed that excretion of less than 60 to 70 per cent of phenolsulphonephthalein in two hours is an indication of renal insufficiency. It has been found, however, that in certain experimental conditions, phenolsulphonephthalein may be destroyed in the body and therefore not appear in the urine, although the kidneys function normally. If this condition is found to occur in clinical cases the interpretation of the tests may have to be limited to this: an excretion of 60 to 80 per cent, *i. e.*, a positive result, within two hours after the injection of the phenolsulphonephthalein, is evidence of satisfactory renal activity (Journal A. M. A., February 3, 1917, p. 379).

GLYCEROPHOSPHATE COMP. AMPULS, 1 CC., SQUIBB.—The Council on Pharmacy and Chemistry refused recognition to Glycerophosphate Comp. Ampuls, 1 Cc., Squibb, each said to contain sodium glycerophosphate 0.1 gm., strychnin cacodylate 0.0005 gm., and iron cacodylate 0.01 gm., because the same did not indicate the potent ingredients and because the administration of a mixture of sodium glycerophosphate, strychnin, cacodylate and iron cacodylate is irrational. In recognition of the Council's conclusion, Squibb & Sons state that the sale of the ampules has been discontinued. This co-operation in the work of the Council on Pharmacy and Chemistry is gratifying (Journal A. M. A., February 3, 1917, p. 388).

EMETINE IN DYSENTERY AND PYORRHEA.—Emetine is accepted today as an almost ideal specific against amebic dysentery. Experience indicates that by its use abscess of the liver can be prevented and even cured. When a differential diagnosis between amebic and bacillary dysentery cannot be made, emetine may be of diagnostic value, because improvement follows from its use if the case is amebic. In neglected cases and some other forms of the disease the emetine treatment may fail of complete success. As a direct cure for pyorrhea emetine seems to have failed, not because it does not act on the ameba which are found in the pyorrheal pockets, but because pyorrhea is not caused by ameba (Journal A. M. A., February 3, 1917, p. 374).

THE J. B. L. CASCADE TREATMENT.—The "treatment" is exploited by Charles A. Tyr-

rell, New York City. It consists in the self-administration of rectal anemas by means of a divide, the J. B. L. ("Joy-Beauty-Life") Cascade. The "complete treatment" includes a stick of Tyrrell's "Famous Rectal Soap" and a box of the "Celebrated J. B. L. Antiseptic Tonic." The "tonic" was analyzed in the A. M. A. Chemical Laboratory and found to be a mixture of sodium chlorid and impure borax, colored and perfumed. The laboratory concluded that a preparation having all the "antiseptic" and "tonic" properties of J. B. L. Antiseptic Tonic can be made by mixing 2.8 ounces common salt with 1.2 ounces powdered borax (Journal A. M. A., January 6, 1917, p. 50).

The Search for the Ideal Antiseptic.—R. A. Lambert has followed the effect of the same chemical agent on bacteria and tissue cells growing together in vitro. He finds that the growth of tissue cells is more easily affected by potassium cyanide, phenol, tricresol, hydrogen peroxid and alcohol than was the growth of bacteria. Iodin stands out as the one chemical tested to which tissue cells were found more resistant than were staphylococci. A good growth of cells was seen after exposure to a 1-in-2,000 solution of iodin for an hour—a strength sufficient to sterilize the tissue completely in most instances. Lambert points out that the power of iodin to dissolve fibrin may be an objection to its use as an antiseptic wound dressing (Journal A. M. A., January 6, 1917, p. 40).

Fate of Trypsin in the Stomach.—Judging by recent experiments, it appears that the proteolytic enzyme of the pancreas isolated as trypsin is capable of withstanding a rather long digestion in presence of hydrochloric acid and pepsin, provided that sufficient protein is present to combine with all or a part of the acid and so bring the free acid down to a certain level. From the observations it seems possible that some tryptic digestion may occur within the stomach when the free acid is low from combination with protein. The results do not, however, even remotely suggest that the administration of a few grains of the various commercial products claimed to contain trypsin or pancreatin would have the slightest therapeutic significance (Journal A. M. A., February 17, 1917, p. 554).

Pil. Cascara Compound-Robins (A. H. Robins Company, Richmond, Va.).—The Council on Pharmacy and Chemistry reports that Pil. Cascara Compound, Robins, is an example of the innumerable mixtures of well-known drugs having nothing in the way of originality or of special therapeutic value to recommend them. The claim that the pills contain no belladonna when they admittedly contain hyoscyamus, is, in view of the similar action of these two drugs, a manifestation of ignorance on the part of the manufacturer or an effort to impose on the medical profession. The promotion of this mixture as "an ideal aid to any remedial agent when a mild, medium or strong alimentary stimulant is needed" is a slur on the intelligence of physicians. The Council finds Pil. Cascara Compound, Robins, not acceptable for New and Nonofficial Remedies (Journal A. M. A., January 27, 1917, p. 303).

Toxicity of Salvarsan and Neosalvarsan.—Claude L. Shields, M. D., Salt Lake City, reports that out of the last twenty-three injections of neosalvarsan four cases exhibited severe poisoning and one resulted in death. He reports the experience of other physicians of severe toxic symptoms from the use of recent shipments of salvarsan and neosalvarsan (Journal A. M. A., January 6, 1917, p. 53).

Q-Ban Hair Color Restorer.—Untoward effects from the use of Q-Ban Hair Color Restorer are reported. The Connecticut Agricultural Experiment Station reported the "restorer" to be a perfumed, alcohol-glycerin solution of 1.68 gms. per 100 c.c. of lead acetate, containing 3.08 gms. of free sulphur in suspension. The Connecticut report states: "It is simply one of the many familiar lead acetate-sulphur preparations, and its use is by no means free from danger" (Journal A. M. A., January 6, 1917, p. 54).

Biniodol.—The Council on Pharmacy and Chemistry reports that Biniodol is claimed by the manufacturer, Charles C. Yarbrough, Memphis, Tenn., to be a solution of 1 per cent mercuric iodid and 2.75 per cent guaiacol in a vegetable oil, and that it is marketed with the implication that it is new and superior to other oil solutions of mercuric iodid. The Council found that the claims of novelty and of superiority were not substantiated by the evidence. Clinical investigation did not demonstrate the effects of Biniodol to be different from those of solutions prepared in the A. M. A. Chemical Laboratory, with and without guaiacol. The Council declared Biniodol inadmissible to New and Nonofficial Remedies

because claims of superior efficiency were not established, and because it is an unessential modification of an established nonproprietary article marketed under a proprietary name (Journal A. M. A., February 24, 1917, p. 650).

CASTA-FLORA.—The Council on Pharmacy and Chemistry reports that Casta-Flora, put out by the Wm. S. Merrell Chemical Company, is one of those complex preparations which are offered to the medical profession with plausible arguments in support of the claims made. The Council finds the claims made for this mixture of drugs—which is said to contain or represent chestnut leaves, passion flower, gelsemium, elecampane, "iodized lime," menthol and yerba santa—and for the individual ingredients thereof, extravagant and misleading. Even if the ingredients, or certain of them, were useful in the treatment of those conditions for which Casta-Flora is recommended, no one could possibly foresee the effects in any given case from this jumble of drugs. The Council holds that the prescribing of such mixtures, the action of which cannot be foreseen, is plain charlatanism and declares Casta-Flora inadmissible to New and Nonofficial Remedies (Journal A. M. A., January 27, p. 303).

MORE MISBRANDED NOSTRUMS.—The following "patent medicines" have been declared misbranded under the U. S. Food and Drugs Act, chiefly because unwarranted curative claims were made for them: Dr. Thatcher's Liver and Blood Syrup, claimed to cure all liver complaints and many other ailments; Black's Pulmonic Syrup, a water-alcohol solution of ichthyol, glycerin and sugar; Walker's Pain Destroyer, an alcoholic solution of oil of mustard, chloroform, opium and collodion; Musterole, a mixture of lard or some similar material with oil of mustard, menthol and camphor; Snyder's Bitters, claimed to eradicate scrofulous humors, syphilitic affections, cancerous humors and many other ailments; "5 Drops," a mixture of eucalyptol (or a eucalyptol-containing oil), camphor, safrol, terpineol and eugenol (or an oil containing those ingredients, such as camphor oil); Dr. Stuart's Specific Drops, a mixture of camphor, alcohol, mercuric iodid and turpentine (Journal A. M. A., January 20, 1917, pp. 214-215).

MORE MISBRANDED NOSTRUMS.—Chiefly because of unwarranted therapeutic claims, the following "patent medicines" were found misbranded under the federal Food and Drugs Act: Goff's Cough Syrup, a syrup containing some vegetable extractive and traces of iron, iodids, antimony and alkaloids; Goff's Herb Bitters, a water-alcohol solution of aloes, sugar and alkaline carbonate flavored with peppermint; Dander-Off, an alkaline solution of borax and white arsenic colored with coal-tar dye; Tu-Ber-Ku, a tuberculosis cure containing 20 per cent alcohol; Electrozone, claimed to contain or to liberate ozone; Orange Blossom Female Suppositories, containing boric acid, aluminum salt, sulphate, potassium salt, sodium salt, starch and petrolatum; Dr. Simpson's Vegetable Compound, essentially an alcoholic-water solution of potassium iodid with a small amount of vegetable extractive in which podophyllum, licorice and gentian were indicated; Weller's Stone Root and Gin, containing 37.5 per cent alcohol (Journal A. M. A., January 13, 1917, p. 135).

FIROLYPTOL PLAIN AND FIROLYPTAL WITH KREOSOTE.—The Council on Pharmacy and Chemistry reports that Firolyptal (The Tilden Company) is said to be composed of eucalyptol 10 drops, cotton seed oil ½ ounce, and Firwein enough to make 1 ounce; and that, as the composition of Firwein is secret, the composition of Firolyptol is also unknown except to the manufacturers. Firolyptol with Kreosote is said to contain, in addition to whatever may be the component parts of Firolyptol, 10 minims of creosote to each ounce. The advertisements for these two preparations seem to have for their keynote the assertion that cotton seed oil is a particularly valuable nutriment and that when combined with the constituents of Firolyptol and Firolyptol with Kreosote it becomes particularly valuable to the tuberculous. The Council discussed the extravagant claims made for these proprietaries; reminds that food and fresh air, not drugs, constitute the fundamentals of the treatment of tuberculosis; and finds that neither of the products is acceptable for New and Nonofficial Remedies (Journal A. M. A., February 17, 1917, p. 564).

IRON CITRATE, GREEN.—H. K. Mulford Company and E. R. Squibb & Sons submitted to the Council on Pharmacy and Chemistry ampules containing solutions of iron citrate, green. It thus became necessary for the Council to consider the eligibility of iron citrate, green, itself for admission to New and Nonofficial Remedies. As the rules of the Council provide that nonessential modifica-

tions of official or nonproprietary preparations will not be recognized, the above named firms were asked to state what advantage, if any, the so-called iron citrate, green, has over the official iron and ammonium citrate. Inasmuch as no evidence was presented to show that iron citrate, green, has any advantage over the well-known iron and ammonium citrate, the Council held that iron citrate, green, and with it the dosage forms, were ineligible to New and Nonofficial Remedies. Advised of this decision, the Mulford Company replied that in the present case it felt bound to supply the existing demand. Squibb & Sons replied that, to give the Council its support in this matter, the sale of iron citrate, green, and ampules thereof would be discontinued (Journal A. M. A., January 13, 1917, p. 135).

More Misbranded Nostrums.—The following "patent medicines" were found misbranded under the U. S. Food and Drugs Act, chiefly because false and fraudulent therapeutic claims were made for them: Collins' Ague Remedy, admittedly containing 33⅓ per cent alcohol; Swaim's Panacea, containing nearly 5 per cent alcohol, 58.5 per cent sugar, 0.1 per cent salicylic acid, and some sarsaparilla; Swayne's Panacea, essentially the same as Swaim's Panacea in composition; Croxone, capsules containing a white pill and a red oil —the oil was oil of pine or oil of juniper dissolved in a fatty oil, while the pill consisted essentially of strychnin, a trace of brucine, aloin, hexamethylenamin, lithium carbonate, potassium nitrate, and probably a trace of atropin; Freeman's Balsam of Fir Wafers, lozenges consisting of sugar with very small amounts of oil of turpentine and eucalyptus with the possible presence of balsam of fir; Reene's Pain-killing Oil, essentially a water-alcohol solution of sassafras oil and cayenne pepper containing 78.6 per cent alcohol and 4 per cent volatile oils and possibly a little mustard oil and soap; Schuh's Yellow Injection, an aqueous solution of boric acid, carbolic acid and berberin; Schuh's White Mixture, a mixture of mucilage of tragacanth, balsam of copaiba, and probably sandalwood oil, flavored with cassia; Elmore's R'eumatine Goutaline, apparently a dilute tincture of colchicum; Armstrong's Croup Ointment, containing eucalyptus and traces of other oils, possibly cassia and thyme; Anticephalalgine, containing 30 per cent alcohol and 4 grains acetanilid to the ounce, sodium bromid, sodium salicylate, caffein and antipyrin; Wright's Rheumatic Remedy, an emulsion composed principally of turpentine, methyl salicylate, sugar, acacia, and water, with probably some resinous or plant extractive matter; H. C. C., a watery solution of borax and berberin sulphate; Russell's White Drops, containing 13 to 16 per cent of alcohol as well as codein; Pneumovita, a sweetened gum, containing small amounts of charcoal and iron phosphate having a wintergreen flavor; Mecca Compound, an ointment containing carbolic acid, camphor, borates, zinc compound, sodium soap in a soft paraffin base; Best Cough Remedy, a spearmint syrup containing alcohol, chloroform and morphin; Stella-Vitæ, a female weakness remedy; Vegetable Pulmonary Balsam, a syrup flavored with spearmint, sassafras, containing alcohol and opium (Journal A. M. A., February 17, 1917, pp. 565 to 566; February 24, 1917, p. 651).

County Societies.

HOT SPRING COUNTY.

(Reported by W. G. Hodges, Sec'y.)

Malvern.—The Hot Spring County Medical Society met in this city February 28. Officers elected for the ensuing year as follows: President, E. T. Bramlitt, Malvern; vice president, J. A. Cox, Donaldson; secretary-treasurer, W. G. Hodges, Malvern; delegate to the State Society, J. M. Williams, Malvern.

Dr. J. H. Smith of Magnet was elected to membership.

The following have paid their dues for 1917: E. T. Bramlitt, J. M. Williams, E. H. McCray, R. Y. Phillips, W. G. Hodges, Malvern; H. Hardy, Social Hill; J. A. Cox, Donaldson; J. H. Smith, Magnet.

The society meets at 5 p. m. on the first Wednesday in every month.

JEFFERSON COUNTY.

(Reported by J. Frank Lieberman, See'y.)

A regular meeting of the Jefferson County Medical Society was held in the offices of Drs. Breathwith, Jenkins and Withers, on Tuesday night, March 6, 1917, the following members being present: Drs. Breathwit, Blankenship, Crump, Gill, Lieberman, Lemons, Lowe, Palmer, Pitman, Johns and Woodul.

The minutes of the previous meeting were read and approved without correction.

There were no reports from outstanding committees, but under the head of clinical cases several interesting histories were related,

as follows: Dr. Blankenship reported a ease of a woman, who, while driving a car, ran over an object and the steering wheel was jammed against the lower abdomen. She was forced to go to bed and showed evidence of more shock than one would ordinarily anticipate from such an injury, and up to the present time he had been unable to make a positive diagnosis of the intra-abdominal trouble.

Dr. Palmer reported a case of a negro male about twenty years old, who had pneumonia about one month ago to be followed by a dry gangrene of a toe, involving about half of the foot. The toes resembled those of a cadaver and looked as if they could have been easily brushed off. He was running a temperature of about 100 or 101 degrees. Gave no history of previous trouble with feet and no direct cause could be attributed to this condition.

Dr. Crump reported a ease somewhat similar of a ehild ten years old, that he had seen following a case of typhoid fever. During the patient's eonvalescenee, he eomplained of pain in right leg from knee to foot following the course of the blood vessels. He developed a dry gangrene of the toes similar to the ease reported by Dr. Palmer. Patient seemed to be getting along fairly well until one night when he sat up in bed to take a drink of water and fell back dead. An autopsy was not done, but he coneluded death was due to embolus.

Dr. Lieberman reported a ease of ehronie malaria that did not seem to be reached by quinin. Dr. Lowe said that he had gotten good results in these eases by giving the quinin with powdered ginger. Cinehonidine or some preparation of that order was suggested as a substitute of quinin when the latter did not seem to give results.

Two of the men on the program failed to read papers, but a very timely and instruetive one was read by Dr. Crump on ear troubles complicating eruptive fevers. The writer described the anatomy of the ear and struetures closely associated with it. He elaimed that the infeetion traveled up the Eustachean tube by continuity or contiguity from the inflammatory condition in the throat or from oedema and swelling of the tube, causing constriction and interference in drainage, thereby being a favorable culture media for organisms. If there is no pus formation, the condition is treated with hot applications, irrigations and installations. Carbolyzed glycerin being instilled either with or without cocain. If suppuration has taken place, incision and drainage is the eourse to pursue.

The paper was ably discussed by Dr. Breathwit, who brought out the point that the majority of infeetions were forced there by coughing, sneezing, or blowing the nose.

Dr. Lemons asked the question as to prognosis to hearing following these infections.

Dr. Crump in conelusion said that the deafness was due to the swelling and congestion of the mucous membrane, and when this subsided, sound waves were easily transmitted. Of course, this does not include the suppratide eases, for then the prognosis is far worse. In ordinary cases the hearing is usually restored in from ten to fourteen days, depending upon the amount of eongestion and rapidity of absorption.

There being no further business, the society adjourned at 9:25 o'clock.

Book Reviews.

BLOOD PRESSURE, FROM THE CLINICAL STANDPOINT. —By Francis Ashley Faught, M. D., formerly Director of the Laboratory of Clinical Medicine at the Medico-Chirurgical College, Philadelphia. Second edition, thoroughly revised. Octavo of 478 pages, illustrated. W. B. Saunders Company, Philadelphia, 1916. Price, $3.25 net.

In this new edition the author introduees a large amount of clinical material including many new eharts illustrative of various types of blood pressure changes, from which it is hoped to aequire a more practical view of the subjeet.

CONSTIPATION, OBSTIPATION AND INTESTINAL STASIS.—By Samuel Goodwin Gant, M. D., LL. D., Professor of Diseases of the Colon, Sigmoid Flexure, Rectum and Anus in the New York Post-Graduate Medical School and Hospital. Second edition, enlarged. Octavo of 584 pages, with 258 illustrations. W. B. Saunders Company, Philadelphia, 1916. Cloth, $6.00 net; half morocco, $7.50 net.

In this edition the author has made many changes. Seven more ehapters and many new illustrations have been added. Every aspeet of eonstipation, obstipation and intestinal stasis is given ample attention. Treatment in particular is thoroughly eonsidered.

THE SURGICAL CLINICS OF CHICAGO, Volume I, No. 1 (February, 1917).—Octavo of 221 pages, 83 illustrations. W. B. Saunders Company, Philadelphia, 1917. Published bi-monthly. Price per year: Paper, $10.00; cloth, $14.00.

This is the first number of the Surgical Clinics of Chicago, an entirely new publieation which has just been placed on the market. It is a new work that will not only eover general surgery, but all the specialties as well—gynecology, genito-urinary work, and eye, ear, nose and throat diseases, ete. It will record the

clinics of some forty leading specialists of Chicago, giving particular attention to diagnosis and treatment.

We believe this new publication will be of particular interest to our surgeons. Among the twelve contributions we find an interesting clinic by Dr. S. C. Plummer, surgeon to St. Luke's.

A Treatment on Diseases of the Skin.—For the use of advanced students and practitioners. By Henry Stelwagon, M. D., Ph. D., Professor of Dermotology, Jefferson Medical College, Philadelphia. Eighth edition, thoroughly revised. Octavo of 1,309 pages, with 356 text-illustrations and 33 full-page colored and half-tone plates. W. B. Saunders Company, Philadelphia, 1916. Cloth, $6.50 net; half morocco, $8.00 net.

In the preparation of this book, Dr. Stelwagon has endeavored to present the practical part of the subject in such manner as to make the work one that will give the general practitioner a full comprehension of the symptomatology, diagnosis and treatment of the various skin affections with which they are most likely to come in contact.

Those particularly interested in dermatology will appreciate the new articles on occupational dermatoses, paraffinoma, purpura annularis, telangiectodes, xanthoma, elasticum and ulerythema ophryogenes.

International Clinics.—A quarterly of illustrated clinical lectures and especially prepared original articles by leading members of the medical profession throughout the world. Edited by H. R. M. Landis, M. D., Philadelphia. Volume IV. Twenty-sixth series, 1916. Published by J. B. Lippincott Company, Philadelphia, Pa. Price of this volume, $2.00.

The contents of this volume is composed of several articles on "Medicine," "Pediatries," "Obstetries," "Neurology," "Ophthalmology," "Genito-Urinary," "Public Health" and "Surgery." Of unusual interest is the article by Dr. V. P. Blair, St. Louis, on "The Treatment of Cleft Palate and Hairlip in Early Infancy." On the question as to the age of election for operating upon congenital clefts of the palate and lip, Dr. Blair says: "Within the first twenty-four hours is the ideal time, (1) because at this age the infant seems almost immune to shock and stands the necessary hemorrhage remarkably well. We have never had a death from shock or hemorrhage in an infant under two weeks of age. (2) It is a great relief to the parents to have the first operation over and the child presentable in appearance. (3) The earlier the operation is done, the easier is the forceful adjustment of misplaced bones accomplished. (4) At birth, no matter how wide the cleft and how great the distortion, there is usually enough material to make a repair. When left unrepaired the distortions tend to increase and the tissues do not grow in proper proportion. A very poor repair of the lip will not prevent these distortions; but when a fair adjustment is made it tends to become more perfect with growth. (5) After an early repair there is more chance of preserving the mother's milk. The article is illustrated.

The Clinics of John B. Murphy, M. D.—At Mercy Hospital, Chicago. Edited by P. G. Skillern, Jr., M. D., Philadelphia. October, 1916. Volume V, Number 5. Published bimonthly by W. B. Saunders Company, Philadelphia. Price per year, $8.00.

Two very interesting articles are given in this number, one on "Varicose Veins and Varicose Leg Ulcers," and the other a report of the clinic for the B. & O. railroad surgeons held at Mercy Hospital, June 15, 1915. Dr. Murphy demonstrates cases which make the strongest appeal to railroad surgeons. Case I —Burns. Case II—Fracture near the knee joint. Case III—Spiral fracture of the femur. Case IV—Fracture in the epiphyseal line half across and then an upward split, with displacement of the fragments. With further description of fractures near joints. Case V —Impaction of the tibia. Case VI—Fracture of the patella. Cases VII and VIII—Fracture with nonunion in which a bone-transplant has been made. Cases IX and X—Tuberculosis of the hip joint. Case XI—Fracture of the neck of the femur. Case XII—Elongated ligamentum patella. Case XIII—Potts' fracture. Case XIV—Metastatic arthritis of the hip joint. Case XV—Bony ankylosis of the hip joint. Case XVI—Fracture in the trochanteric zone. Case XVII—Very bad case of bowlegs in an adult in which he performed double fracture. Case XVIII—Nonunion of the tibia following fracture. Case XIX—Metastatic arthritis of the knee with effusion. Case XX—Displacement of the semilunar cartilage with traumatic synovitis. Cases XXI, XXII and XXIII—Split semilunar cartilage. Case XXIV—Tuberculosis of the knee in an adult. Case XXV—Arthroplasty of the knee. Case XXVI—Recurrent external luxation of the patella. Case XXVII—Fracture of the anatomic neck and a luxation of the head out of the glenoid cavity. Case XXVIII—Fracture of both radius and ulna and displaced toward the volar aspect. Cases XXIX and XXX—Ankylosis of the jaw.

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ANNUAL SESSION, LITTLE ROCK, MAY 1, 2, 3

THE JOURNAL OF THE Arkansas Medical Society

Owned and Published Monthly by the Arkansas Medical Society

VOLUME XIII
No. 11

LITTLE ROCK, APRIL, 1917

Yearly Subscription $1.00
Single Copy 25c

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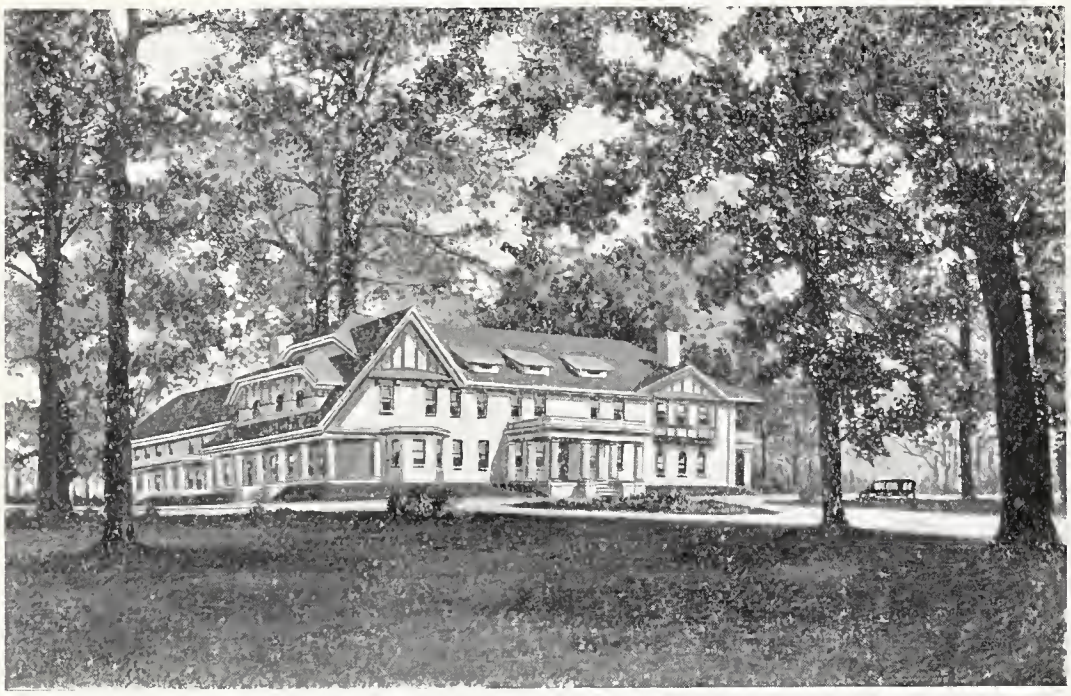
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THE JOURNAL

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Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIII. LITTLE ROCK, ARK., APRIL, 1917 No. 11

Original Articles.

INFORMATION REGARDING THE CORRELATED ACTIVITIES OF THE COUNCIL OF NATIONAL DEFENSE AND THE ADVISORY COMMISSION, THE MEDICAL DEPARTMENTS OF GOVERNMENT AND THE COMMITTEE OF AMERICAN PHYSICIANS FOR MEDICAL PREPAREDNESS.

By Frank F. Simpson, M. D.,
Pittsburg, Pa.

Chief of Medical Section of the Council of National Defense, and Secretary, Committee of American Physicians for Medical Preparedness.

MEDICAL PREPAREDNESS.

Under existing conditions it is desirable that every physician, as well as every other loyal citizen of America, should be prepared to render active service to the federal government, remembering that the protection afforded by the government has made it possible for its citizens to enjoy liberty, peace and prosperity.

The avenues through which the most effective service can be rendered by members of the medical profession have taken definite and concrete form. Briefly, the plan is that all medical activities should co-operate with the Council of National Defense.

It would seem desirable at this time to state explicitly just what the Council of National Defense and its various agencies are.

The Council of National Defense was created by act of Congress, August 29, 1916.

"Sec. 2. That a Council of National Defense is hereby established, for the co-ordination of industries and resources for the national security and welfare, to consist of the secretary of war, the secretary of the navy, the secretary of the interior, the secretary of agriculture, the secretary of commerce, and the secretary of labor.

"That the Council of National Defense shall nominate to the president, and the president shall appoint, an advisory commission, consisting of not more than seven persons, each of whom shall have special knowledge of some industry, public utility, or the development of some natural resource, or be otherwise specially qualified, in the opinion of the council, for the performance of the duties hereinafter provided. * * *

"That the Council of National Defense shall adopt rules and regulations for the conduct of its work, which rules and regulations shall be subject to the approval of the president, and shall provide for the work of the advisory commission to the end that the special knowledge of such commission may be developed by suitable investigation, research, and inquiry made available in conference and report for the use of the council; and the council may organize subordinate bodies for its assistance in special investigations, either by the employment of experts or by the creation of committees of specially qualified persons to serve without compensation, but to direct the investigation of experts so employed."

A committee of distinguished physicians was asked to present to the president, names of medical men suitable for membership on the advisory commission. Dr. Franklin H. Martin of Chicago was selected.

The following statement was issued by President Wilson on the night of October 11, 1916, in announcing his appointment of the civilian advisory members of the Council of National Defense:

"The Council of National Defense has been created because the Congress has realized that the country is best prepared for war when thoroughly prepared for peace. From an economic point of view, there is now very little difference between the machinery required for commercial efficiency and that required for military purposes.

"In both cases the whole industrial mechanism must be organized in the most effective way. Upon this conception of the national welfare the council is organized in the words of the act for 'the creation of relations which will render possible in time of need the immediate concentration and utilization of the resources of the nation.'

"The organization of the council likewise opens up a new and direct channel of communication and co-operation between business and scientific men and all departments of the government, and it is hoped that it will in addition become a rallying point for civic bodies working for the national defense. The council's chief functions are:

"1. The co-ordination of all forms of transportation and the development of means of transportation to meet the military, industrial and commercial needs of the nation.

"2. The extension of the industrial mobilization work of the Committee on Industrial Preparedness of the Naval Consulting Board and complete information as to our present manufacturing and producing facilities adaptable to many-sided uses of modern warfare will be procured, analyzed and made use of.

"One of the objects of the council will be to inform American manufacturers as to the part which they can and must play in national emergency. It is empowered to establish at once and maintain through subordinate bodies of specially qualified persons, an auxiliary organization composed of men of the best creative and administrative capacity, capable of mobilizing to the utmost the resources of the country.

"The personnel of the council's advisory members, appointed without regard to party, marks the entrance of the nonpartisan engineer and professional man into American governmental affairs on a wider scale than ever before. It is responsive to the increased demand for and need of business organization in public matters and for the presence there of the best specialists in their respective fields. In the present instance the time of some of the members of the Advisory Board could not be purchased. They serve the government without remuneration, efficiency being their sole object, and Americanism their only motive."

As indicated above, the Council of National Defense therefore consists of six members of the cabinet, as follows: The secretary of war, chairman; the secretary of the navy, the secretary of the interior, the secretary of agriculture, the secretary of commerce, the secretary of labor.

The Advisory Commission of the Council of National Defense consists of seven civilians appointed by the president. The members of the Advisory Commission are as follows: Mr. Daniel Willard, president of the Baltimore and Ohio Railroad, chairman; Mr. Hollis Godfrey, LL. D., president of Drexel Institute, Philadelphia, Pa.; Mr. Howard E. Coffin of Detroit (who is also chairman of the Committee on Industrial Preparedness of the Naval Consulting Board); Dr. Franklin H. Martin of Chicago; Mr. Bernard Baruch, financier, of New York; Mr. Julius Rosenwald, vice president of Sears, Roebuck & Co., of Chicago; Mr. Samuel Gompers, president of the Federation of Labor.

The two bodies meet in joint session at frequent intervals for the purpose of considering problems relating to national defense.

The executive activities of the Council of National Defense are co-ordinated and carried out through the medium of the director of the Council of National Defense, Mr. W. S. Gifford, and the chiefs of the various departments represented by the members of the Advisory Commission. Dr. Frank F. Simpson is chief of the Medical Section of the Council of National Defense.

The Advisory Commission.

The organization of the council and of the Advisory Commission provides that each member of the Advisory Commission shall gather about himself for the most effective co-ordination of the activities he represents, a committee or board consisting of representatives of governmental departments on the one hand, and civilian members on the other hand.

The Medical Committee, of which Dr. Franklin H. Martin is chairman, consists of: Wm. C. Gorgas, surgeon general of the U. S. Army; Wm. C. Braisted, surgeon general of the U. S. Navy; Rupert Blue, surgeon general of the U. S. Public Health Service; Col. Jefferson R. Kean, director general of Military Relief of the American Red Cross; Dr. Wm. H. Welch, member of the National Council of Research; Dr. Wm. J. Mayo, chairman of the Committee of American Physicians for Medical Preparedness; Dr. Frank F. Simpson, chief of the Medical Section of the Council of National Defense, and secretary of the Committee of American Physicians for Medical Preparedness.

Many medical problems which have bearing upon the national defense are considered by Dr. Martin's committee and by the Advisory Commission and the Council of National Defense before being put into action by the governmental departments concerned.

Committee of American Physicians for Medical Preparedness—Its Component Parts.

National and State Committees.

In April, 1916, the national committee was appointed by the joint action of the presidents of the American Medical Association, the American Surgical Association, the Congress of American Physicians and Surgeons, the Clinical Congress of Surgeons of North America, and the American College of Surgeons. To that committee was delegated the responsible duty of formulating plans whereby the civilian medical resources of the United States might be ascertained and effectively co-ordinated for such purposes as might be required by the federal government.

The national committee organized, selected a chairman and secretary and an Executive Committee, and appointed a state committee of nine strong men in each state of the Union.

It is the fixed policy of this committee that all presidents and secretaries of the various state medical societies shall be members of their respective state committees during their incumbency in office. From the first it was contemplated that at the proper time the organization of committees would be perfected in each county of the country. That time has now come, and county committees are being rapidly organized.

In each instance the state committees are expected to select the county committees and to supervise their formation.

Name and Personnel of County Committees.

It is the fixed policy of the Committee of American Physicians for Medical Preparedness that the various important medical interests and activities of each county shall be represented on the county committees. This is done for the purpose of co-ordinating the important interests and activities so that the medical profession of the nation may present a compact and effective organization for the purpose of aiding effectively in the national defense. In order that this plan may be carried out with uniformity and precision throughout the country, the various state committees have been requested to have all county committees bear the following distinguishing name, to-wit: The Auxiliary Medical Defense Committee of.....County, in.....State. The state committees have also been requested to provide that the county committees shall include the following in their list of members:

1. All members of National Committee of the Committee of American Physicians for Medical Preparedness, resident in the individual county.

2. Members of the state committee resident in or near the individual county.

3. Representatives of the U. S. Army resident in the individual county.

4. Representatives of the U. S. Navy resident in the individual county.

5. Representatives of the U. S. Public Health Service resident in the individual county.

7. Representatives of the State or City Public Health Service.

8. Ranking medical officer of the National Guard.

9. President and secretary of the local Medical Officers' Reserve Corps Association, if there should be such an organization.

10. Deans of medical schools.

11. President and secretary of the County Medical Society.

12. President and secretary of any other important medical societies.

13. Medical director of the local Red Cross units.

14. Other representative medical men.

Duties of County Committees.

From time to time specific duties will be assigned to the various state and county committees. These duties will be in accord with the policy of the Council of National Defense, and should be executed promptly and precisely by those who are called upon to cooperate in this matter with the Council of National Defense.

The committee will call to their assistance those who have been appointed field aides by their various state committees and such other physicians as they may desire to have cooperate with them.

Among the specific duties which the county committees are requested to perform at this time are the following:

First. That these committees co-operate with the national and state committees of the Committee of American Physicians for Medical Preparedness in their efforts to gain needful information regarding the civilian medical resources of their own communities, and in their efforts to co-ordinate civilian medical activities for prompt mobilization in case of need.

Second. That they secure applicants:

(a) For the Army Medical Corps. If the president should call the full complement of troops already authorized by Congress, the regular army would need about 1,200 additional medical officers. If a million men should be called, a corresponding increase would be required.

(b) For the Medical Officers' Reserve Corps. If war should come, 20,000 to 30,000 medical reserve officers should be enrolled.

(c) For the Naval Medical Corps, which needs about 350 additional officers.

(d) For the Coast Defense Reserve Corps of the navy. Several hundred high-class reserve medical officers are desired.

(e) For the National Guard, such numbers as may be required to bring your local National Guard to full strength.

In the preparation for national defense, the first thing needed will be medical officers.

Physicians recommended for such service should be of the highest type. They should be free from suspicion of addiction to drugs or drink.

Medical officers who go to field duty should by preference be under the age of forty-five.

Third. That they co-operate, individually and collectively, with the Medical Department of the army, navy and Public Health Service and with the Council of National Defense.

Fourth. That they co-operate with the Red Cross in their efforts to bring that organization to the highest point of efficiency.

COMMITTEE OF AMERICAN PHYSICIANS—ACTIVITIES ACCOMPLISHED AND IN PROGRESS.

On the 26th of April, 1916, the Executive Committee of the Committee of American Physicians tendered the services of the committee to the president of the United States. He expressed himself as being pleased with the patriotic tender of services and regretted that existing laws did not permit the acceptance by the federal government of gratuitous services, but stated that the matter would be referred to the secretary of war and the secretary of the navy for the purpose of devising plans by which the good offices of the medical profession could be accepted and utilized to best effect by the federal government. He further stated that the plans would be referred to the Committee of American Physicians for comments and suggestions. The Executive Committee was permitted to make suggestions regarding the bill creating the Council of National Defense.

During the last year this committee and its various subsidiary bodies have been actively engaged in formulating and carrying out various activities in conformity with the general plans for national defense, which have been undertaken by the federal government.

The splendid work done by the various state and other committees was of such extent and value that the Council of National Defense at its first meeting requested the Committee of American Physicians to continue their various activities under the guidance of the Council of National Defense, and asked the secretary of the Committee on American Physicians to act as chief of the Medical Section of the Council of National Defense. Since that time the various activities have gone forward with renewed energy.

Some of the activities which have either been completed or are well under way, follow:

First. Some 20,000 medical men selected from all parts of the country have been classified according to the training and the kinds of work which they do best.

Second. An inventory of hospitals and other medical institutions is well under way.

Third. It has been the fixed policy of the Committee of American Physicians to aid the American Red Cross in bringing its Medical Department to the highest point of efficiency. With that object in view, and in order to foster the spirit of co-operation, the members of the national committee of the Committee of American Physicians accepted invitations to become members of the national committee of the Medical Department of the American Red Cross. In order further to promote the harmonious co-operation of the two organizations, most of the members of the various state committees of the Committee of American Phy-

sicians were also made members of the state committees of the American Red Cross. The various county committees will also be expected to co-operate in carrying out the plans of the two organizations.

Fourth. The establishment of military training for senior medical students in a large percentage of the high-grade medical schools of the country.

Fifth. The establishment of more effective military training for hospital groups for members of the Medical Officers Reserve Corps, for dental students, and others.

Sixth. The appointment of a Committee for the Standardization of Medical and Surgical Supplies and Equipment. The purpose of this work is to designate a list of articles essential to the successful conduct of civilian and military medical and surgical activities, so that in the event that it should become necessary to curtail production, all of the energies of the drug and instrument makers would be devoted to necessary articles rather than to those which are desirable but not essential. On this Standardization Committee are representatives of the army, the navy, the Public Health Service, the Red Cross, the Council of National Defense, and a number of the most distinguished members of the various specialties of civilian medicine. In their work of co-ordination and standardization, this committee will take council with the manufacturers of the various supplies under consideration.

Seventh. Much valuable information supplied by medical and other observers who have worked in the war zones of Europe is being gathered and classified.

Eighth. The presidents of important national medical organizations of the country have been requested to suggest to the medical section of the Council of National Defense the kinds of work which members of those organizations are best fitted to perform, and to suggest plans whereby their activities and resources might be utilized to best advantage. This request does not contemplate an inventory and organization of these resources. The purpose is that having received suggestions offered by the various organizations, those suggestions will be maturely considered and such as conform to the plans of the Council of National Defense and can be utilized to advantage, will be adopted. The various organizations will, in that case, be requested to co-operate fully and promptly in perfecting the plans of the Council of National Defense.

The foregoing memorandum embodies only a very small percentage of the problems now under consideration. It is neither wise nor desirable, however, to present them in detail at this time.

CASE OF UNCINARIASIS COMPLICATED WITH HYPERCHLORHYDRIA AND PYLORASPASM.*

By T. M. Fly, M. D.,
Little Rock.

Mr. A., white, native of Louisiana, twenty-three years old, single, weight 143 pounds. Patient came to my office September 5, complaining of stomach trouble.

Family History.—Mother and father living and in good health. One paternal uncle suffered several years with stomach trouble. One brother and three sisters in good health. Parents lived on farm where patient was reared.

Previous History.—Patient had usual diseases of childhood, but no complications, and health was good until about two years before the date of his first visit to me. At that time he began to suffer more or less discomfort in epigastric region after eating. This discomfort came on without regard to length of time after eating, sometimes within an hour and sometimes two or three or even four or five hours after eating. Sometimes a week or more would pass without any discomfort. Patient never vomited or belched, but always felt if he could belch or vomit he would be relieved. Never was awakened with pain after midnight. Indeed, he always felt easier after lying down. No history of tarry stools. Venereal, alcoholic and drug history negative. Had taken very many different kinds of medicine, some of which gave temporary relief. Had lost twenty-four pounds in weight.

Physical Examination.—Temperature, respiration and pulse normal. No objective symptoms, save a slight puffiness under eyes and a slight swelling of the pylorie region of the stomach, or what I took to be that condition. This swollen end of stomach, or upper part of duodenum, was very painful when pressed upon. To complete this examination a test meal consisting of two average-sized

*Read before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2, 3, 4, 1916.

pieces of dry toast followed by a glass of water was ordered and patient instructed to report to me one hour after eating same. Upon aspirating stomach, an excessive amount of fluid was obtained, together with about half the amount of the test meal. Macroscopic examination of this fluid revealed nothing of importance, save too great a quantity. Microscopic examination revealed nothing of pathological significance. Chemical examination revealed marked hyperchlorhydria.

Free HCL. 90, and combined acidity 30—total, 120. Test meal was repeated and stomach contents examined on three consecutive days with practically no variations in findings. I now thought my patient suffering from an inflamed pylorus with probably an ulcer of no great depth, but sensitive to excessive amount of HCL. To relieve his symptoms and give irritated part of mucus membrane an opportunity to regain its normal condition, I attempted to neutralize the acidity by giving alkalies and frequent feedings of a non-irritating diet. Also, I washed patient's stomach out every morning before breakfast with a solution of bicarbonate of soda. Almost invariably from one to three ounces of greenish-colored fluid was obtained. The patient always felt better after lavage. The patient improved about ten days. At that time some indiscretion in diet, namely, the eating of a part of a raw pear, brought on a new attack of pain, and he came to my office in the afternoon requesting that his stomach be emptied with a tube. This was done. A large quantity of greenish-colored gastric juice was obtained. This fluid contained excessive free HCL. During lavage some small pieces of pear were washed out, and finally, when the tube was plugged and had to be withdrawn, the eye was stopped with a larger piece of pear than the patient had thought he had swallowed. This circumstance illustrates the fact that few patients or persons masticate their food sufficiently well. The tube was reintroduced, the stomach finally entirely emptied, and the patient was then given half bottle of a saline water through the tube and directed to bring me a specimen of the first results of the purge for microscopic examination, it having, at length, dawned upon me that this man might be suffering from the effects of some intestinal parasite. A microscopic examination of this specimen revealed the presence of a great number of hookworm eggs. The next day being Sunday, and my patient being a working man, I availed myself of the opportunity of giving him an early treatment. The patient was directed to fast from Saturday noon and take a purgative dose of Epsom salts at 5 p. m.

Sunday at 6 and 8 a. m., 15 grains each of thymol and sugar of milk were administered in capsules. At 10 a. m. Sunday one-half ounce of Epsom salts was given in water. Three good evacuations were had by 2:30 p. m. and a number of parasites passed with each movement. At 4 p. m. the patient was given a cup of black coffee with no cream or sugar, and toasted cracker without butter. After taking this beverage the patient was able to walk about the house, but was somewhat weak from the combined effects of the fasting, salts and thymol. The patient now being convinced that I had discovered the real cause of his trouble, was anxious to repeat treatment as often as I suggested. Therefore, weekly examinations of the feces were made, and every time ovae were found the thymol treatment was repeated. Three consecutive examinations showed ovae.

The fifth and sixth examinations were negative. The seventh positive, eighth negative, and ninth, tenth and eleventh positive. The ninth, tenth and eleventh treatments consisted of 45 grains of thymol and 30 grains of sugar of milk given at 6 and 8 a. m., instead of the original 30-grain treatments. During this time there was a gradual diminution in the hyperacidity and an increase in the patient's weight of twenty-four pounds. The patient expressed himself as feeling better than he had since he was seventeen years old. The alkalies and diet were faithfully persisted in and for a part of the time 15 drops of belladonna were exhibited at bedtime to diminish the pyloric spasms and with the hope in some degree of shutting off the hypersecretion. For three months the stomach was washed every morning and the two months following, every other morning. During the last two months the contents of the stomach varied in the morning from nothing to two or three ounces of fluid, which was more or less highly acid. Only infrequently now was this fluid colored with bile. This patient continues to come to my office twice a week for fear of having a backset, but is looking well and for more than a month I have been unable to find any ovae in the feces.

The points of interest about this case are, first, that I treated him ten days before asking for a specimen of feces, notwithstanding that this examination is part of my routine, and

that this patient was in the habit of spending his summer vacation on his father's farm in Louisiana. This last fact alone should have suggested the probable cause of trouble at our first interview.

Second, that it is impossible to free a patient of hookworms in one or two or three treatments of thymol in a great many instances.

Third, that the question arises to me whether this superacidity was due to irritation of hookworms on the duodenal wall, or a regurgitation of bile into the stomach as the result of the swelling in the duodenum. In reading in Nothnagel's Encyclopedia of Practical Medicine, I found the assertion that "Simitzky found in experiments on dogs that when the bile ducts were tied, the gastric mucus membrane secreted free HCL. in excess.

The superacidity disappeared in every instance with the disappearance of the jaundice. In one instance where there was a relapse of the jaundice the superacidity returned.

From these experiments it would appear that, in animals, the retention of bile increases the sensitiveness of the gastric mucus membrane to normal stimuli."

In the discussion I hope to have the opinions of this society as to whether the regurgitation of bile into the stomach would have the same effect upon its mucus membrane as absorption of the retained bile would influence this membrane.

DISCUSSION.

Dr. C. W. Garrison (Little Rock): I have never had an opportunity to check up a case as carefully as this has been checked up. Those of us who have had a good deal of field work, treating hookworm disease, have seen most every complication following that of uncinariasis, seen in any other disease.

There are two points that he stressed which, it seems to me, should be impressed on all of us. One is the inclination to suspect uncinariasis more often than we do, and second, to make an examination, or have an examination made of the feces for the purpose of making a diagnosis.

A great many statements were made in the hookworm campaign for a period of five years in the South, and first prejudice obtained in the minds of the profession relative to the disease; possibly statements were made that could not be substantiated. No doubt a good deal of exaggeration in some instances was made. But the whole profession is now coming to realize that uncinariasis is just as much a disease as other diseases, and that was the real purpose in the establishment of the commission. But I doubt, judging from the experience I had as others had in this state, that the profession yet fully realize the full significance of the hookworm disease.

It was our misfortune, as it was with many doctors in other states, to find in many instances in this state, patients who had been treated by the family physician for numbers of years for heart, kidney or other diseases which were only sequlae to uncinariasis. We were compelled to make these diagnostic tests and we were compelled to make demonstrations in order to be able to get the people to accept them. We had to give thymol and we had to demonstrate to the people we were right, and we would cure these patients who had been in the hands of the family physician for a number of years, who had been treating them for dropsy and for heart lesions. You can get any kind of heart lesion in a severe chronic case of uncinariasis that will defy the best men in the profession to differentiate from an organic lesion. We gave them a little thymol and they improved rapidly, and they would stand out as a mockery almost to the local physician. It was through the commission that we got the people to accept the idea that there was such a thing as uncinariasis. The profession now accepts it, but they do not yet fully appreciate the prevalence of it, and many times fail to cure their patients by overlooking the point that Dr. Fly brought out, that an examination should be made of the feces, and, where intestinal parasites obtain, remove them.

The routine administration of thymol, as outlined by Dr. Fly, will, as a rule, after three or four treatments, cure the patient, and, when there are no complicating factors, you get an immediate recovery.

I have found also and know that it is not quite as easy to cure all cases as we suppose. He cites one instance. I happen to know that Dr. Fly has had very many obstinate cases, some that required many treatments, eight or ten, and then sometimes thymol will not cure. As a rule, however, and I think it is one of the principal reasons that all cases are not cured, is that soon after the administration of a few doses of thymol, they will improve to such an extent that you regard them as cured. There are a great many technicalities that will prevent the demonstration of the ovum in the feces, and they have been discharged as cured, when in fact they were not, and later on, a year, two or three, they would develop a train of symptoms and be in a debilitated condition later. It is one thing the profession should devote more time to.

I want to say that Dr. Fly has done as much careful work in the investigation of this disease and its etiology as any man I know of. He had some of the most interesting cases of the entire commission. One case in mind stands out in the commission as one of the most striking—the case of Della Carder. The secretary of the commission, Dr. Rose, delivered a lecture in London, England, and displayed these pictures of Della Carder, of Grant County, before and after treatment, and in his lecture nothing brought forth as much applause as the presentation of these pictures.

It seems that the outside world has accepted this disease and taken hold of it in a businesslike manner, a good deal more than the United States has, because the Hookworm Commission was solicited by foreign countries to such an extent that it was internationalized, and other countries in the tropical and semi-tropical zones are now receiving the work of the commission, and it is doing much better and more efficient work than it did in this country, because it is receiving the co-operation of the profession.

Dr. L. T. Evans (Newark): I would like to ask the doctor in his treatment of the hookworm disease if he has ever had a poisonous effect from thymol in any of the cases. I have had a case where I gave him the treatment at the beginning and he got along pretty well. About two or three weeks afterward, I gave him another treatment, and I got bad results. I thought my patient was going to die. I believe it was due to the thymol. I would like for him to bring that out in his closing remarks.

Dr. Thos. Douglass (Ozark): Dr. Fly ought to be earnestly commended for his excellent work in this field, in bringing to our attention this important disorder, the frequency with which it occurs and the necessity for persistent and active treatment in order

to get rid of it. He reported our county as having about 4 per cent of infections. We don't have many cases. I expect that sort of situation makes it more likely for us to overlook those cases that do occur, not seeing them often.

Dr. Fly (closing the discussion): Answering Dr. Evans' question, I believe I have treated something like 2,500 cases at the outside of hookworm disease, and I never used anything except thymol and betanaphthol, and in my entire experience I have had no untoward symptoms at all, that I ever knew about. Some of these patients complain of being weak after taking thymol, but I have attributed that, as I said in the paper, to the fact that they have been starved for a greater or lesser time, and, taking Epsom salts, I would give as a drastic purge, and then the effect of the thymol and salts after that. And, if you do get just a slight absorption from the thymol, probably you do get some untoward symptoms, but that has not been my fortune.

I might cite an instance that occurred just the other day, after I had written this paper. Dr. George Fletcher was called in consultation in Argenta to see a man who had been hurt in a railroad accident and had some paralysis following it. On his way back, the doctor with whom he had been consulting requested him to go and see a little girl. He stopped to see the girl. She had been under the treatment of several physicians. Among other things, they had determined to operate on her for delayed menses. Fletcher looked at her and thought she might be infected with some kind of intestinal parasite. He suggested that they bring a specimen of her feces over to me for examination, which they did, and I found a great number of ova on the first slide. I showed the ova to Dr. Fletcher and someone else in the building; otherwise I doubt if my word would have been taken about this diagnosis. But, Fletcher is a man above reproach and his word goes everywhere. The doctor in attendance on this case called me up to know what he should do for her. Fletcher having reported that this girl was in extremis, I advised him over the telephone if she was in the condition that Fletcher said she was, and I didn't doubt it, I wouldn't do anything for her. He said something must be done, that she was going to die. I said, "Well, if you give her thymol, she will in all probability die, and if you don't give it to her she will die. But, if you give it to her you will get the credit for killing her." But he gave it to her—thirty grains, I believe, or twenty—and she died in about seven hours; but she would have died anyhow. She was practically dead then. We did a post-mortem on that child the next day. I had high hopes of making some discovery there that would be of interest to the majority of this society. Unfortunately, I found nothing, except that we took out the pyloric end of the stomach and duodenum, and I took that specimen down to the medical college and opened up the duodenum and found a most tenacious mucus in large quantities hanging all over the wall of the duodenum, sticking there so tight and close that you could hardly rake it off with your finger nails. We took out the appendix in the hopes of finding a parasite there, or some of the eggs. We didn't find anything. But, the duodenum was severely congested, and I thought its congestion was probably due to the effect of these parasites before death, and not altogether due to post-mortem changes. We took out the kidney, and Dr. Shipp made an examination of the kidney and found a severe inflammation in the glomeruli, I believe he said. He didn't send it to me on paper, but only told it to me on the telephone. I forgot what he did say. But this complication, I judge, was the cause of death. We also found in the lung of this patient a contracted area that we had hoped to get examined, too, by Dr. Shipp, but in some way, in the manipulation, this specimen was lost, and we didn't get it examined.

Here was a girl fourteen or fifteen years old, who was just about to be operated upon for delayed menses. If you surgeons know what operation is good for delayed menses, unless you have some lack of organs there, I don't know. For there are some cases of atresic vagina, but she didn't have anything like that. Here was a case of extreme emaciation and pallor following the effect of these parasites, and which was about to submit to an operation for delayed menses. This only brings to my mind the experience of a great many other people who have allowed themselves to be duped by men who *want* to operate. Understand, I am not condemning the *surgeons*, because they are my friends. This is one of the most important cases I had, and it made an impression on me.

Another case was that of a sister of a man whose case I had reported, who was treated by a physician in Little Rock who advertises in the Democrat. He had been persuading her that she needed an operation on her right ovary, that she must have that ovary removed. Her brother being a friend of mine, a patient of mine, wanted her to come to me and have my opinion on the subject beforehand. She looked very much more like a patient suffering from parasites than did her brother. I made an examination and found these intestinal parasite eggs in the feces, and showed them to her and her husband through a microscope, and the husband was convinced that she ought to at least have these parasites removed before undergoing the operation, which was all I advised, telling her after she had been rid of the parasites it would be plenty of time to subject herself to an operation if she still thought she needed it. This woman was thoroughly under the influence of the other man. She wanted that operation; she didn't want anything else. But, through the combined argument of her brother and her husband, she decided to let somebody treat her for hookworms before she undergoes that operation. I think that it is pretty good missionary work, whenever we can persuade her to keep that ovary a month or two longer.

Dr. Garrison: For the benefit of the members present, I want to make one or two statements with reference to the treatment. That's a question often raised. There is considerable toxicity following the administration of thymol under certain conditions. The technic in its administration is simple; but, if not carried out, you may get into trouble. I happen to know of a few cases where the technic has not been carried out properly, and unpleasant symptoms followed; it may be due to lack of proper knowledge on the part of the attending physician, or may be due to the patient failing to carry out the instructions. If this simple procedure is adhered to, I think you will have no reason to fear the administration of thymol. There is some slight shock naturally attendant upon any drug that is depressing, and there is some effect of that kind following the absorption of thymol, and you get absorption if the technic is not carried out. The thing you want to do is to thoroughly evacuate the alimentary canal. A good many men who have had a good deal of experience vary as to the best method of doing that, but, for all practical purposes, place the patient on liquid diet the day before administering the treatment next morning. In the afternoon give magnesium sulphate in sufficient quantity to thoroughly evacuate the bowels before bedtime. The next morning keep the patient in bed, on the right side while taking medicine, in order to gravitate the thymol out of the stomach as quickly as possible. Administer thymol at 6 and 8 o'clock a. m., magnesium sulphate again at 10 a. m., and repeat in two hours if necessary. When good results obtain, give the patient tea, coffee, toast, poached egg, or any light diet containing no fats.

"ONE WAY OUT."

By Don Smith, M. D.,
Hope.

At our last meeting in Little Rock, in May, 1915, I read a paper which offered some practical suggestions for the uplift of the general practician. I wish to reiterate what I said then, and make it stronger, and in this paper I want to present another phase of the subject, which is of equal importance, but which lies wholly with the general practician. In the paper last year I urged the necessity of being thorough—of being careful of technic—of being "on the job" in such a way that you would be indispensable to your community. I also urged the specialists in all lines to keep "open shop" for you, and do it free of charge, because I think it would enhance their business as well as yours. It would make for efficieney in all lines of medicine and surgery. I believe yet it is the salvation of our profession, which is beset on all sides by isms of every charaeter.

This paper has to do with that part of the general practician's affairs which no amount of training, either hopsital or otherwise, can help, except in an indirect way. Of course, the hospital and other training fits the man for the job, and brings him the patients; but it does not bring him the material aid at which I am trying to get.

To make a long story short, I am talking about the money end of the profession, that end of it which brings the necessities and comforts of life.

I think this statement will go unchallenged, that no set of men on earth do so mueh for which they receive so little as the medical men. The slum worker does a wonderful work, and I would not detract from him one iota of praise. The philanthropist by his generous gifts has done, and will do, a wonderful work for humanity, and we need more of them. I wish we had some in every county who would give enough to build hospitals for the paupers, and do away with the poorhouses.

Let me digress here and pay my respects to the poorhouses, as I know them.

If there is anything that should make the people in any county hang their heads in shame, it is the faet that there exists in that county a place called the poorfarm, on which the paupers are placed and cared for (or rather not cared for).

Paupers belong to one of two classes; they are either aged persons or diseased persons, and in either case wholly unfit for manual labor until properly treated and properly fed.

The poorhouses or farms are usually let to the lowest or to a low bidder, and God pity the poor soul who is so unfortunate as to drift that way, for "He who enters here leaves hope behind." Have I made it strong enough, gentlemen of the Arkansas Medical Society?

Back to the subject again, then. The slum worker, the philanthropist, the churches, are doing wonderful things for the suffering ones of the human race, but back of it all, down in the trenches is found the medical man, meeting the common enemy of mankind, often with poor equipment—often staggering under the burden—and worst of all, half paid.

Now, I take the position that any physician, to bring out the best that is in him, must have the right sort of food, no matter what it costs—pleasant home surroundings, plenty of rest, time to read and think, and means to visit the best clinicians.

Under existing conditions this is impossible, because if he gets enough out of his business to purchase the best food, the pleasant home and visit the great clinics, he is not going to get the needed rest and time to read and think. If he takes the rest and time to read, the other fellow gets the business.

"Why," you say, "ean't he do this under existing circumstances?" To tell you why is the object of this paper.

Every doctor of my acquaintance does enough praetice to do all this I have been talking about, and still have enough to swell his bank account—if he could only collect for the work he does.

Now, no person is the object of charity who is able to work, even though he may be very poor. If he wastes his earnings, this should not be charged up to the doctor, and neither should the doctor have the burden to bear, but you and I know that this is always the case.

Suppose, for instance, a family moves into your neighborhood, and some member or members of that family get sick; the head of the family, who is a lazy, shiftless sort of chap, has no money; the neighbors gather around, and through sympathy bring in a generous supply of groceries and then advise the family

*Read by title before the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 2, 3, 4, 1916.

to send for "Doe," as they are pleased to call their particular favorite.

They (the neighbors) talk to the family in about the same strain as James Whitcomb Riley does in his poem entitled "Doe Sifers," a part of which follows:

Of all the doctors I could cite you to in this 'ere town,
Doc Sifers is my favorite, jes' take him up and down!
Count in the Bethel neighborhood, and Rollins, and Big Bear,
And Sifers' standin's jes' as good as ary doctor's there!

There's old Doc Wick, and Glenn, and Hall, and Wurgler, and McVeigh,
But I'll buck Sifers 'g'inst 'em all and down' em any day!
Most old Wick ever knowed, I s'pose, was whiskey! Wurgler—well,
He et morphine—ef actions shows, and facts' reliable!

* * * * * * * * * *

And take Doc, now, in ager, say, er biles, er rheumatiz,
And all afflictions thataway, and he's the best they is!
Er janders—milksick—I don't keer—k-yore anything he tries—
A abscess, getherin' in yer yeer, er granilated eyes!

There was the Widder Daubenspeck they all give up fer dead;
A blame cowbuncle on her neck, and clean out of her head!
First had this doctor, what's-his-name, from "Puddlesburg, and then
This little red-head, "Burnin' Shame" they call him —Dr. Glenn.

And they "consulted" on the case, and claimed she'd haf to die—
I jes' was joggin' by the place, and heerd her dorter cry,
And stops and calls her to the fence; and I, says I, "Let me
Send Sifers—bet you fifteen cents he'll k-yore her!" Well," says she,

"Light out!" she says. And lipp-tee-cut I loped in town, and rid
'Bout two hours more to find him, but I kussed him when I did!
He was down at the gunsmith shop a-stuffin' birds! Says he,
"My sulky's broke." Says I, "You hop right on and ride with me!"

I got him there. "Well, Aunty, ten days k-yore you," Sifers said.
"But what's yer idy livin' when yer jes' as good as dead?"
And there's Dave Banks—jes' back home from war without a scratch—one day
Got ketched up in a sickle-bar, a reaper runaway.

His shoulders, arms and hands and legs jes' sawed in strips! And Jake
Dunn starts fer Sifers—feller begs to shoot him fer God's sake.
Doc, 'course, was gone, but he had penned the notice, "At Big Bear—
Be back tomorry; gone to 'tend the Bee Convention there."
But Jake, he tracked him—rid and rode the whole endurin' night!
And 'bout the time the roosters crowed they both hove into sight.
Doc had to ampitate, but 'greed to save Dave's arms, and swore
He could a-saved his legs ef he'd been there the day before.

So off goes the *pater-familias* for you. You feel so flattered because "Mrs. So-and-So" has referred him to you that you just go without any questions about the pay. You are afraid you might hurt yourself with "Mrs. So-and-So" if you refuse, and the result of it is, the family of strangers soon owe you a bill, which they never intend to pay. A few months later you try to see Mr. Pater-familias, and learn from "Mrs. So-and-So" that he has "folded his tents like the Arabs and silently stolen away," to repeat this performance in the next neighborhood.

You've had this experience, haven't you? I have had it many times. But not once have the neighbors made up money to discharge even a portion of the doctor's bill. Is this fair to us? Aren't we called upon every day of our lives, and sometimes several times in a day, to give of our substance to those in need, and to other sources? And don't we always give it, and gladly, at that?

I want to say right here, that most doctors are generous fellows. Talk about your preachers, priests, etc., but when I am "up against it" give me the doctors I have known. When I am suffering pain, I had rather hear one's voice at my bedside, than the meaningless mumbling of "the robed priest of the most authentic creed."

But back to the subject again. I do not think more should be expected of us than is expected of other business men, and yet I know more is expected. Society demands that we go when called, no matter what the cost, and yet I feel we may have made our own lot a little harder by not demanding our rights.

For instance, the grocer won't feed even the needy without the assurance of his pay. The dry goods man won't sell them clothing without some assurance of remuneration. Even the undertaker won't bury the dead without the county or the city gets behind his bill. I am talking about the real charity cases now, those who are absolutely helpless and dependent.

Now, what do we do in these cases? We go to see them, give them our services, and never think of charging them anything; in fact, we are willing as a body to do this, but is it alto-

gether a moral obligation to do it absolutely free? In some states this is covered by statute. Where anyone is sick and utterly unable to pay, the county pays his bill. This puts the burden on all alike and makes it easy to bear. That ought to be the law in Arkansas. It would certainly be an equitable one.

But the class we have to deal with, that hurts us worse, is that class to which a good per cent of humanity belongs (if a doctor's account book is allowed as witness), namely, "the deadbeats."

This class is in no sense subject to charity and should in no sense be regarded as charitable objects. In other words, if we have to work for them, we should receive one hundred cents in the dollar for our work.

You wonder how it can be done. It is a problem, gentlemen, and its solution is the "One Way Out."

In certain portions of the state there are doctors who keep each other posted as to who owes them and who is good, and who is bad pay. If a man is behind with one of these physicians, and he is satisfied the man is making no effort to pay his bill, his name, the amount he owes, and whom he owes, is listed with all the doctors in that community. If he calls for another doctor, he is at once told whom he owes, and the amount, and he must make arrangements to pay his bill with the first doctor before he can get medical assistance. If he agrees to do this, and does it, then the second doctor will do his work, knowing if he stays in that community he will not lose the bill. If the second doctor goes, knowing the person is indebted to the first doctor, the second doctor becomes responsible for the account. This plan is working well, they say, and it or some similar one should be adopted by the county medical societies.

It makes better men of the "deadbeats" and makes the careless fellow more particular, and will bring you, Mr. Doctor, the much-needed things mentioned in the beginning of this paper. The plan for collecting, just hinted at in the above paragraph, may be a little too severe, but it could be modified, and put upon a good working basis, which would meet the approval of all.

And, gentlemen of the Arkansas Medical Society, we ought to do this one thing. I don't mean adopt it as a body, but when we get back home, take it up with the doctors of our towns or communities, and do as the merchants do—protect ourselves and make people respect us. I don't mean for us to become mercenary or niggardly in our dealings with humanity. We will do the real charity work as we have done it before, but let us remember that every man we work for and don't make him pay at least what he can, we have assisted in making him a tramp.

I, as a health officer of my town, have often begged the good women of the churches not to give to any except to those who are in the sorest predicament. A child, who is the recipient of charity, must gradually lose his self-respect, and finally join the vast army of charity-made tramps. If a man comes to your door begging a meal, teach him self-respect by giving him an axe or hoe, and let him earn his bread. If he asks for your services, demand in return some remuneration.

I would not have you forget the story of the good Samaritan, for he found his enemy helpless, and helped him. But I would have you remember those who are dependent upon you, and those who have a right to expect some of life's comforts and advantages at your hands.

The United States Public Health Service has taken cognizance of the dangers of poisonous fly papers. The following is extracted from supplement No. 29 of the Public Health Reports:

"Of other fly poisons, mention should be made, merely for the purpose of condemnation, of those composed of arsenic. Fatal cases of the poisoning of children through the use of such compounds are far too frequent, and owing to the resemblance of arsenical poisoning to summer diarrhea and cholera infantum, it is believed that the cases reported do not by any means comprise the total. Arsenical fly-destroying devices must therefore be rated as extremely dangerous and should never be used, even if other measures are not at hand."

There seems to be no sufficient reason for permitting the unrestricted sale of arsenical fly destroyers, and it would be well if other states followed the lead of Michigan in this and regulated their sale. On request we will be pleased to send to anyone interested a copy of the Michigan law.

The profession must need actively to exercise its educational influence to abolish this evil.—The Journal of the Michigan State Medical Society.

THE JOURNAL
OF THE
Arkansas Medical Society

Owned and controlled by the Arkansas Medical Society and published under the direction of the Council.

DR. WILLIAM R. BATHURST, EDITOR

PUBLISHED MONTHLY. Price, $1.00 a Year in Advance. Single Copies, 25 Cents.

Entered as second-class matter, June 21, 1906, at the post-office at Little Rock, Arkansas, under Act of Congress of March 3, 1879.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Address:
The Journal of the Arkansas Medical Society,
810 Boyle Building,
Little Rock, Ark.

ADVERTISING RATES:
Upon request, a schedule of rates will be furnished.

ANONYMOUS COMMUNICATIONS.
Anonymous communications will not appear in the columns of this Journal, no matter how meritorious they may be.

Editorials.

THE MAY MEETING.

This will be the last issue of The Journal before the forty-first annual meeting of the Arkansas Medical Society, May 1, 2 and 3.

The scientific program is published elsewhere in this issue and it is unique in that the Committee on Scientific Work has placed on it only Arkansas talent. The original intention was to have every county in the state represented and the committee regrets that not enough papers were tendered to make this possible. However, the program is an excellent one and should please and edify all who attend.

There has been some belated criticism because no distinguished outsiders were invited. This is untimely, because it will be remembered that before work was commenced on the program, the committee, through The Journal, invited all members to give their views as to whether a home-talent program or otherwise should be given. Those who wrote favored a home-talent program, and accordingly this plan was carried out. Those who object now have, as the lawyers say, "slept on their rights." The time to object was when opinions were solicited; it is too late now. We believe that the innovation, at least occasionally, is a good one, in that it serves to bring out the native talent—and there is plenty of it in the state. The Kentucky society followed this plan and found it successful.

The Entertainment Committee of the Pulaski County Society has provided an ideal central location for the meetings which will be held in the old statehouse on West Markham Street. Among the social functions provided will be a reception and dance at the beautiful new home of the Mystic Shriners at Twenty-first and Main Streets, past which run two lines of street cars. The ladies will be well entertained by the wives of the Little Rock members.

A new feature will be the medical and surgical clinics to be given the day preceding the first meeting (Monday, April 30). A list of the clinics will be found in this issue.

Now let every member come to the meeting and make it the most enthusiastic and helpful one ever held by the society. Everyone will be accorded a cordial welcome to the capital city and there will be plenty to interest the visiting members outside of the business, social and scientific sessions.

AN OPPORTUNITY TO SERVE YOUR COUNTRY AT HOME.

An appeal has been sent out by Dr. H. A. Higgins, assistant surgeon, United States Navy, to the medical profession of the state, asking their co-operation with the navy in securing young men for enlistment in the navy.

Our navy offers wonderful opportunities for travel, education and the learning of trades, with prospect of rapid advancement.

Our navy needs 75,000 men and Washington has allotted about 1,000 from Arkansas. We have the young men anxious for this opportunity if they could only be advised of its advantages. In an effort to interest physicians in rendering this service to the country, letters have been sent asking this of our profession, and it should be met with action on our part.

Officers state that if every physician in Arkansas would encourage just one young man we would soon reach the number desired.

Reports show much interest among the doctors in this work and many are having notices published in local papers saying that information and preliminary examination can be had from them free of charge.

Substations are located at Fort Smith and Jonesboro, where young men may be sent if more convenient.

Further information may be secured by applying to the Navy Recruiting Station, Little Rock.

SERVE YOUR COUNTRY WHILE THE OPPORTUNITY PRESENTS.

THE STATE HOSPITAL FOR NERVOUS DISEASES.

Again we have to record a change in the management of the above institution, following the final ousting of Dr. Bledsoe under the Supreme Court ruling. The new superintendent, Dr. C. C. Kirk of Toledo, Ohio, comes with excellent recommendations as to his ability and experience, and it is devoutly to be hoped that, at least during the present administration, the hospital will not again become a politieal football. It is not necessary to go into the merits of the Bledsoe case—it is common knowledge, however, that beginning with Dr. Greene, the State Hospital has been used as a means of rewarding political henchmen, and, on the other hand, of punishing enemies or those regarded as such by the Board of Control or still higher offieials. It is regretable that the late legislature did not pass a bill which would effeetually take the hospital and all eleemosynary institutions definitely out of politics for all time to come. It is an outrage on the taxpayers who foot the bills, and a greater outrage on the unfortunate inmates, that politics and not ability should dictate the policies of such state institutions. We have every confidence in Governor Brough. We believe he has higher aspirations than to use his position in any way to further his political ambitions, reward friends or punish enemies at the expense of the state; but the principle is all wrong. Governor Brough will not always be governor, and as the law stands, the institutions still are political playthings to be used according to the whims or prejudices of a partisan body with the ehief exeeutive, as the appointive power of that body, having almost a paramount privilege of removal of the most useful and experienced men. At least one competent alienist who was considered as superintendent, refused the offer on the ground that the incumbent would be subject to dismissal without adequate cause, as had occurred to former superintendents.

It is gratifying to note in this connection that Dr. R. F. Darnall is to be assistant superintendent, and Dr. D. C. Lee has been reinstated as pathologist. This is in the way of vindication of them, as they were victims of the system herein criticised.

NOURISH WELL THE YOUNG.

Cable advices are to the effect that as the result of experiments in Belgium, Germany is revising her theories and practices as to the manner of feeding her people and there is to be a notable increase in the food ration given the youth of the land to insure a more vigorous manhood. There can be no question but that the undernourished child is permanently affeeted through life in many instances. While the youth is growing, nourishing food in abundance is essential to insure a vigorous development, physical and mental also. This is an additional reason why it may be necessary for the government to take stern measures to cheek the tendency to higher prices for foodstuffs, because it is clear that under present eonditions high prices are affeeting the very people who constitute the bone and sinew of the country. All wealth eomes, in the last analysis, out of the ground, hence the wealth of any country is in its labor. What hurts the labor of the country hurts the eountry. Wealth, meaning the actual money wealth, is slow to recognize this fundamental faet, but that does not make it any less a fact, and some day there is likely to be an awakening.

Greed has diverted useful factors from their rightful mission and has turned blessings into curses. Take, for instance, the factor of cold storage. Originally it promised to be a great blessing in that eggs, when plentiful, could be conserved for future use, when the supply exceeded the demand. Also meats could be conserved in like manner, carried long distances and supplied at lower priees by removing the waste. But greed has changed all this, so that except for what eggs are marketed direct from the country, the average consumer gets no fresh eggs. The fresh eggs go into storage and the older ones come out of storage for eonsumption. "Cornerers" of this commodity rule prices so that the ultimate use of the cold storage system has been to raise prices all the year round, sometimes taking them beyond the reach of the proletariat, give inferior eggs, and make fortunes for the men who are apparently devoid of conscience in their dealings with their fellow-men. In like manner, vegetables and

fruits are made the means of piling up vast wealth at the expense of the consumer—prices are arbitrarily fixed and the product is inferior. Congress has, it is true, fixed a time limit on cold storage in an effort to protect the consumer, but it is evaded with consummate ease. When the time limit expires for meats and eggs in one cold storage plant, the product is simply removed to another, where it remains till another move is in order. At a time when eggs were beyond the reach of the poor and a shortage was alleged to exist, the newspapers told of the destruction by government inspectors of thousands of dozens because they had been so long in cold storage they were pronounced unfit for human consumption. Other countries, forced to act because of the war, have assumed control of the food supply. The proper nourishment of the people at large is a matter of such vital importance that the government may yet find it necessary to follow the example.

Editorial Clippings.

CONSERVE THE MUCOUS MEMBRANES.

The mechanical efficiency of the sound skin as a protective agent against the invasion of the body by micro-organisms is obvious. Little credit for a similar protection is usually accorded to the mucous membranes. It is true that the latter do not furnish the same degree of resistance or immunity which the external coverings of the skin afford. Nevertheless it ought to be realized that many organisms can be implanted with impunity on mucous membranes, especially on those portions which are engaged in the production of mucus or which are provided with a ciliated epithelium as a safeguard. The underestimated usefulness of the mucus secreted by the membranes of the nasal cavities is more easily appreciated when the circumstances to which they are exposed are related. It has been estimated that under normal conditions of life in large cities, from 15,000 to 20,000 bacteria enter the nose in an hour's quiet respiration. Yet under normal anatomic and physiologic conditions few of these organisms ever reach the nasopharynx in a viable condition. To some extent, at least, the mucus secreted is responsible for this. It is reputed to have an inhibitory if not an actual bacterial effect on germs; and a liter of mucus per day has been reported as representing the amount of available secretion. The highly specialized epithelium of the trachea and nose is further effective as a protection against unorganized dust. Perhaps if this were more universally recognized and taught, ciliated mucus-secreting membranes would be treated in a less irritating manner. How many physicians realize that when the ciliated cells are destroyed by caustics, operative procedures or disease, they are frequently replaced by squamous cells, and the efficiency of the nose as a protective organ is correspondingly impaired?—Journal of the American Medical Association, March 24, 1917.

THE ARMY SURGEON.

It is safe to say that the majority of physicians who are considering offering their services to the government at this time have only a slight conception of the difference between military duties and civilian practice. The glamour of surgery has been cast over the duties of the physician in war time; but the work of the surgeon usually begins only after the duty of the soldier is done. The surgeon repairs the wounded man. The duties of the physician as a medical officer begin with the enlistment of the man before he is a soldier, take him from the recruiting office into the camp of mobilization, accompany him into the zone of war, select the site for the camp, keep the soldier fit for his duty as a fighting man, guard him from the devastation of infectious diseases, and prevent his incapacitation from exposure, from bad food and from the thousand and one other conditions of army life which are more dangerous than the bullet of the enemy. There is work for the epidemiologist, for the laboratory man, for the ophthalmologist, for the laryngologist, for the dentist and for the diagnostician, as well as for the internist and the surgeon. The surgeon by no means comes first. If any fact has become evident during the last three years, it is that preventive medicine is the most important factor in keeping an army "fit," and, therefore, in the final determination as to which side shall be the victor.—Journal A. M. A.

POLITICS IN A STATE HOSPITAL.

The State Hospital for Nervous Diseases at Little Rock, Ark., has been for two or three years without a permanent superintendent.

Some excellent, experienced and highly trained men have been there, but each, in turn, has been forced out by politics.

Recently Dr. M. B. Heyman, of the Central Islip State Hospital of New York, was offered the superintendency, but, after serious consideration, he declined, giving as his reason that politics in the management of the institution would make any superintendent's tenure insecure, and that no one, however conscientious, could institute the much-needed changes under such conditions. The job is going begging, although it is an opportunity that alienists and state hospital administrators would reflect on a long time before refusing.

How long are the people of this country going to permit peanut politics and graft to manipulate their eleemosynary institutions? And what are the people going to do about it? —The Modern Hospital.

Personals and News Items.

Dr. F. M. Boyd has moved from Graysonia to Little Rock.

Dr. and Mrs. F. O. Mahoney of El Dorado visited in Little Rock this month.

Dr. and Mrs. W. H. Browning of Little Rock visited in Fort Smith last month.

Dr. and Mrs. W. H. Toland of Nashville visited in Little Rock last month.

Dr. and Mrs. E. F. Brewer of Augusta visited in Little Rock last month.

Drs. Rembert and Nichols of Helena announce their association in partnership.

Dr. E. F. Ellis of Fayetteville has recovered from his recent illness and operation.

Dr. G. C. Moore has moved from Hot Springs to Wagoner, Okla.

Dr. M. W. Owens has moved from Truman to Helena.

Dr. G. C. Bruce has moved from Eaglette to Dierks.

Dr. W. R. Hunt of Clarksville is convalescing after a month's illness with pneumonia and infected throat.

The First District Medical Society of Arkansas will meet in Jonesboro under the presidency of Dr. J. P. Lunt of Leonard, April 10, 1917.

Earl H. Hunt of Clarksville, secretary of the Arkansas Tulane Alumni, announces the annual banquet will be held at the Marion Hotel, Little Rock, May 2.

Dr. H. A. Higgins of Little Rock has been appointed as assistant surgeon, Naval Reserve Force, United States Navy, with the rank of first lieutenant.

Announcement has been made of reduced rates on all railroads to Little Rock on account of the annual meeting of the Arkansas Medical Society, May 1, 2, 3.

Dr. C. C. Kirk, assistant superintendent of the Ohio State Hospital for Insane, Toledo, has been elected superintendent of the State Hospital for Nervous Diseases, Little Rock.

Dr. D. E. Drennen of Birmingham has moved to Hot Springs and is now associated with his brother, Dr. C. Travis Drennen, in the practice of medicine and surgery. Office, "Morningside," corner Mountain and Exchange Streets, opposite Fordyce Bath House.

Major Thomas L. Rhoads, Medical Corps, U. S. A., is giving lectures on Military Surgery and Hygiene every Tuesday afternoon at the old statehouse under the auspices of the Medical Department of the University of Arkansas. The medical profession is invited to attend.

Arkansas physicians visiting in Little Rock during the past month include: B. V. Powell, Camden; L. E. Moore, Searcy; E. O. McDermott, Wilmot; C. E. Benefield, Ozark; J. H. Weaver, Hope; B. C. Middleton, Texarkana; J. T. Clegg, Siloam Springs; R. H. Webster, Texarkana; C. F. Crosby, Heber Springs; B. A. Fletcher, Augusta; S. A. Southall, Lonoke.

The Life Extension Institute of New York City announce that the pamphlet which they have prepared on the late dietetic experiment, conducted in New York with the co-operation of the rookies of the Police Training School, is ready for distribution. The pamphlet is called "Regulating the Human Machine" and gives a resume of the experiment, showing "What to Buy," "How to Cook It," and includes economical recipes as well as a simple story of how to feed the family. Anyone can get a copy of this pamphlet by mailing 10 cents in stamps to the Life Extension Institute, 25 West Forty-fifth Street, or to the branch office in Chicago, Philadelphia or Washington.

Chlorazene has already been used in a very large variety of conditions calling for the use of a germicide and antiseptic, and with very gratifying results in nearly all classes of cases. Reports are available of its satisfactory employment not only in deep, infected shell and gunshot wounds in military practice in France, according to the Carrel method, but also in civil practice in lacerated wounds, obstetrical work, diseases of the throat, mouth and nose, diseases of the bladder and urethra, in dental diseases of the mouth, in the treatment of sinuses and fistulas, some of long standing, as an application to indolent ulcers and other breaks of continuity of the skin and mucous surfaces, in the treatment of burns (where it gives remarkable results), in boils, carbuncles, eczema and other skin diseases, and in a great variety of other conditions.

We note that Miss Erle Chambers, field secretary of the State Public Health Association, is going about the state addressing city councils in the interest of sanitation, and that the city authorities, backed by the local boards of health, city and county, are promising to cooperate in cleaning up their respective cities and towns. "Clean-up" days have been set and more attention is being paid to sanitation and cleanliness, without which the health of no community is assured. In this connection also it is noted that the newly appointed hotel inspector, Mr. E. R. Wiles of Pine Bluff, is preparing a schedule which will call for visits to every town in the state to inspect the hotels, restaurants and rooming houses to see that the sanitary laws are complied with. There has been much leniency in this respect, because heretofore there has been no available fund for an inspection of such places, and in many of which many state laws, such, for instance, as forbid the using of common towels and drinking cups and more important provisions, have been glaringly ignored. The Journal endorses any and every measure calculated to improve sanitary conditions.

U. S. NAVY RECRUITING STATION, LITTLE ROCK, ARK.

The United States Navy with new recruiting offices opened in Little Rock, is desirous of obtaining young men of good physical and moral standing for service offered by this department of the government. In an effort to get in touch with desirable young men, they are asking the medical profession of Arkansas to lend their efforts to arouse interest in this important branch of service.

The United States Navy offers desirable young men unusual opportunity of service, travel, education and occupational trades.

They desire that you interest young men in your locality in the advantages of this service and make a preliminary physical examination, and if in your opinion the examination can be passed, refer him to the Navy Recruiting Station, 113 West Second Street, Little Rock, where the examination will be completed.

Every loyal citizen is anxious to render service to his country, and the local physicians have unusual opportunities in this particular matter because of their high standing in the community. You may be assured this is real service.

If your time does not permit your personal effort in this respect, will you kindly send the names and addresses of a few who would probably be interested?—H. A. Higgins, M. D., Assistant Surgeon, U. S. Navy, Little Rock.

OPPORTUNITY FOR YOUNG MEDICAL MEN — GOVERNMENT FILLING VACANCIES IN PUBLIC HEALTH SERVICE.

According to a statement just issued by Surgeon General Rupert Blue, young medical men between the ages of 23 and 32 will be given an opportunity each month to demonstrate their fitness for admission to the grade of assistant surgeon in the U. S. Public Health Service. There are several vacancies in the government's mobile sanitary corps, which is now in the 119th year of its existence, but in order to be recommended to the president for commission, a physical and professional examination must first be passed. As the tenure of office is permanent and the public health officers are ordered to duty in all parts of the world, they are required to certify that they believe themselves free from any ailment which would disqualify them for service in any climate. Boards will be convened at Washington, Boston, New York, Chicago, St. Louis, Louisville, New Orleans and San Francisco, but permission to take the examination must first be obtained from the surgeon general. The examination is searching and includes, in addition to the various branches of medicine, surgery and hygiene, the subjects of the preliminary education, history, literature and the natural sciences. The commis-

sions will be issued as assistant surgeon, and after four years of service the young officers are entitled to examination for promotion to the grade of passed assistant surgeon, and after twelve years of service, to another examination for promotion to the grade of surgeon. The annual salaries are: Assistant surgeon, $2,000; passed assistant surgeon, $2,400; surgeon, $3,000; senior surgeon, $3,500; assistant surgeon general, $4,000. When the government does not provide quarters, commutation at the rate of $30, $40 and $50 a month, according to grade, is allowed. All grades receive longevity pay—that is, 10 per cent in addition to the regular salary for every five years until the maximum of 40 per cent is reached. When officers travel on official duties they are reimbursed their actual traveling expenses.

THE VITAMINE CONTENT.

The interest of physicians the country over has been greatly aroused by the publication of Reprint No. 333 from the Public Health Reports. The article is entitled "Bread as a Food, and Diseases, Malnutrition and the Vitamine Content in Its Relation to Pellagra."

The conclusion of the article that a reduced vitamine content of the diet immediately preceded the rapid increase of pellagra in that section is important as showing the cause of the disease, but the influence of the careless and indiscriminate use of soda in cooking as a cause of the reduced vitamine content of the diet is almost equally important. It shows the necessity of the physician giving advice to the housewife in regard to her methods of cooking.

The use of soda in cooking leaves the food alkaline and the alkali destroys the vitamines. If, however, a proper amount of an acid ingredient is used, the food is not alkaline and the vitamines are not destroyed. In cooking breadstuffs, it has become a custom to use soda only as a leavening agent in certain sections of the country. In these sections pellagra has been prevalent. The physician must take note of this custom and advise its discontinuance.

In other sections, milk or sour milk is used with the soda. This is a better practice, but still is fraught with grave danger. The amount of sourness, or lactic acid, must be guessed at and the corresponding amount of soda also guessed. The housewife seldom ever does any guessing, because she does not understand that a relationship exists between the sourness and the soda. She adds what she considers enough soda to leaven, and what she considers enough milk or sour milk to enrich and moisten. As a result, the food is most often alkaline. The physician should advise against incurring these dangers. They can be absolutely avoided by the use of properly made baking powder, using sweet milk if desired. All well-known brands of baking powder are manufactured under chemical supervision and are reliable, while the housewife's rule of thumb methods with soda are dangerous in the preparation of breadstuffs.

Breadstuffs are the principal food material of a great class of the people, and their vitamine content is therefore to be husbanded and not destroyed. If, as a result of the economic depression beginning with the year 1907, the cost of food has increased out of proportion to the increase in wages, and that the pellagra incidence has also increased considerably since 1907, what are we to expect with the war prices that prevail today, which are felt all over the country? From 1907 there took place a reduction in the diet of the people of such foods as milk, eggs and meat, with a consequent reduction in the vitamine content of the diet. A like reduction is taking place on an even larger scale today, and therefore is the greater need of husbanding the nutritious qualities of bread and cereal products in general.

In this connection should be considered self-raising flour. This is a product containing soda, salt and an acid ingredient. If properly compounded, the soda and acid should neutralize each other and no alkali left in the food to destroy the vitamines. Self-rising flour, however, is being manufactured largely by housewife rule of thumb methods, without chemical supervision. It contains phosphate rich in calcium sulphate, which latter is undesirable in food products. The use of a standard baking powder and a good flour is cheaper for the consumer and is safe. The latter consideration should overcome the tendencies to laziness to which weakness, only, self-rising flour caters.—The Journal of the Florida Medical Association.

Aspirin-Bayer Omitted from N. N. R.—Aspirin-Bayer is advertised to the public, indirectly by means of "vest-pocket" boxes bearing the name "Aspirin" permanently affixed, and directly by means of extensive newspaper advertising. Inasmuch as this advertising propaganda is an infringement of

the rules of the Council and is against the interests of public health, the Council voted to omit Aspirin-Bayer from New and Nonofficial Remedies (Journal A. M. A., January 20, 1917, p. 213).

Neurasthenia: Excluding agents for hemic dyscrasias, strychnin is the only drug with indications in these cases, used here for its indirect acceleration of metabolism.—Bush, N. Y. M. J. (Strychnin is about the most perilous drug to be used in neurasthenia, where the feeble excitability is quickly exhausted by this powerful stimulant.)

Team work and harmony between body functions mean health; mutiny and disorganizations spell disease.—Robertson, B. C. S. S. I.

Success with acute dilatation of the stomach depends on its quick recognition: early repeated lavage, lowering head, elevating pelvis, right lateral or knee-elbow position, saline by rectum or subcutaneous, indicated stimulation, atropin, combat shock, rigid rectal feeding until all symptoms subside.—W. D. Sumpter, Southern Pract.

The ideal opportunity to control the sex passion is in early youth before the tiger that is in us has tasted blood.—Keyes, Ur. and Cut. Rev.

Gonorrhea: Use salines (no cascara, rhubarb or podophyllin); control chordee with bromids; tonics but not quinin; santal and cubebs are the best internal antiseptics—dispense with copaiba; hexamethylenamin of little use; sodium salicylate to acidify urine if needed.—A. M. Wise, Ur. and Cut. Review.

Don't waste time and money massaging simple adenomatous prostatic hypertrophy. Have it removed.—Ur. and Cut. Review.

Catheter life for the elderly man is a thing of the past, now that prostatectomy has been developed that the results are so good and the mortality so low.

The double operation for prostatectomy seems to be gaining in favor; and the dread of surgical intervention may be laid aside when a specialist does it.

The consumptive cougher and spitter is a hundredfold more hostile to our health than a victim of leprosy would be.—Robertson, B. C. S. S. I.

—Medical World.

REPORTS OF COMMITTEES OF THE ARKANSAS MEDICAL SOCIETY.

Cancer Research.

The committee appointed by your distinguished president, on Cancer Research, beg to report that they have been in constant communication with the National Committee on the Control of Cancer, and that the work done by the National Committee on Control of Cancer has been voluminous. Experiments are being carried out in many scientific laboratories which may prove beneficial to humanity, but so far no new definite plan of dealing with the dreadful affliction has been adopted, no effectual new remedy has been advanced since our last annual meeting. It is generally agreed by all investigators that an early diagnosis of cancer cells, with complete removal by surgical means of all involved tissues, offers the best results in the treatment and cure of cancer. This method of dealing with cancer is especially recommended when the cancer involves the mammary glands and the uterus.

Respectfully submitted,

Wm. A. Snodgrass, M. D.,
Chairman,
C. J. March, M. D.,
H. H. Kirby, M. D.

Infant Welfare.

We, your Committee on Infant Welfare, beg leave to make the following report:

We very much regret that owing to two causes we have not been able to accomplish as much as should have been done in this work. First, this being the first committee of this nature, we had no detailed instructions nor plans mapped out for the work. Second, we had no notice of our appointment until about three months ago. After some consideration in the matter, we decided on the following plan of work: To enter into an extensive correspondence with the secretaries of the various county societies and other members of organized medicine, to secure as much data as possible regarding the conditions throughout the state. We wish to learn as near as possible the infant mortality in each locality, the different causes of mortality, whether or not there are working organizations for the betterment of child welfare, and if so, the nature of these organizations, the number of members and the plan of their work; the percentage of breast-fed babies, the percentage of modified cow's-milk-fed babies and the per-

centage of babies fed proprietary and other foods, and the relative mortality resulting under each head.

We entered into rather extensive correspondence reaching every county in the state, and wherever we were able to secure data and get any co-operation, we put forth our best efforts to encourage organizations of child welfare nature and co-operated with these organizations in securing proper literature and suitable speakers at their special meetings. We have also encouraged in a number of towns the Baby Week movement for the last week in April or the first week in May. We are deeply indebted to the Self-Culture Club of El Dorado for their co-operation in this work. This club appointed a standing committee to co-operate with your committee, by corresponding with the club women, asking their co-operation with the local physicians in this work. During these few months of work we have been unable to make as good a showing as we should like to be able to report, greatly due to the fact that we had no satisfactory birth and death registration and that our physicians throughout the state have not responded as promptly as we had expected in giving us such data as we were in need of. However, we succeeded in rousing considerable interest in this work in some twenty or more localities. We believe that as a result of our efforts in these localities, that much more interest will be manifested in the future and the work will come easier for your committee next year. We also believe that we have been instrumental in causing a few Baby Week campaigns to be put on the first week in May.

We find great needs for an active working committee throughout the entire year. It is our opinion that the solution of this high infant mortality in Arkansas will have to come through the mothers and family physicians. Poor hygienic conditions and improper feeding are the most frequent causes and are due to lack of knowledge on the part of the mothers and the possible lack of efforts of the family physician in instructing the mothers. It is evident that without a good knowledge of the birth and death rate, it is impossible to intelligently battle against the causes of infant mortality; therefore, we recommend that the Arkansas State Board of Health, in addition to making it compulsory for registration of births, that on receipt of such registration, they issue a certificate of registration and mail the same to the mother. This we believe to be the only safe and sure method for enforcing accurate registration. Mothers, we find, are very anxious to have their babies registered, but, unless such certificates are furnished, they are too frequently made to believe that such report has been sent in, when it has been neglected by the physician.

We recommend further that a Committee on Infant Welfare be appointed for next year and that the members of this committee receive their notice of appointment immediately after the annual meeting, so that greater good can be accomplished.

F. O. Mahony, *Chairman,*
H. H. Niehuss, *Secretary,*
Morgan Smith,
P. H. Phillips,
C. G. Phillips.

LITTLE ROCK MEDICAL AND SURGICAL CLINICS

Monday, April 30, 1917.

The medical profession is cordially invited to attend the medical and surgical clinics in Little Rock the day preceding the annual meeting of the Arkansas Medical Society.

City Hospital.

9 to 12 a. m. Surgery—Dr. C. E. Bentley.

St. Vincent's Infirmary.

8 to 10 a. m. Eye, Ear, Nose and Throat—Dr. Robert Caldwell.

9 to 12 a. m. Surgery—Dr. W. F. Smith.

Medical Department, University of Arkansas.

12 to 1 p. m. Eye—Dr. F. Vinsonhaler.

1 to 2 p. m. Genito-Urinary — Dr. S. P. Bond.

2 to 3 p. m. Gynecology—Dr. S. J. Fuller.

3 to 4 p. m. Surgery—Dr. W. A. Snodgrass.

St. Luke's Hospital.

9 to 12 a. m. Medicine and Surgery—Drs. J. P. Runyan, H. H. Kirby and J. P. Sheppard.

County Hospital.

9 to 12 a. m. Medicine and Surgery—Dr. C. S. Pettus and staff.

Arkansas School for the Blind.

12:30 to 1:30. Trachoma clinic—Dr. W. T. McCurry.

PROGRAM

Forty-first Annual Session

OF THE

ARKANSAS MEDICAL SOCIETY

Little Rock, May 1, 2, 3, 1917.

Headquarters Old Statehouse.

President—M. L. Norwood, Lockesburg.

First Vice President—L. L. Purifoy, El Dorado.

Second Vice President—J. M. Lemous, Pine Bluff.

Third Vice President—W. R. Brooksher, Ft. Smith.

Secretary—C. P. Meriwether, Little Rock.

Treasurer—Wm. R. Bathurst, Little Rock.

Councilors and Councilor Districts.

First Councilor District—Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph Counties. Councilor, F. L. Nelson, Corning. Term of office expires 1917.

Second Councilor District—Cleburne, Fulton, Independence, Izard, Jackson, Sharp and White Counties. Councilor, J. C. Cleveland, Bald Knob. Term of office expires 1918.

Third Councilor District—Arkansas, Cross, Lee, Lonoke, Monroe, Phillips, Prairie, St. Francis and Woodruff Counties. Councilor, H. H. Rightor, Helena. Term of office expries 1917.

Fourth Councilor District—Ashley, Bradley, Chicot, Jefferson and Lincoln Counties. Councilor, Wm. Breathwit, Pine Bluff. Term of office expires 1918.

Fifth Councilor District—Calhoun, Columbia, Dallas, Lafayette, Ouachita and Union Counties. Councilor, H. H. Henry, Eagle Mills. Term of office expires 1917.

Sixth Councilor District—Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier Counties. Councilor, J. H. Weaver, Hope. Term of office expires 1918.

Seventh Councilor District—Clark, Garland, Hot Spring, Montgomery, Saline, Scott and Grant Counties. Councilor, J. B. Crawford, Benton. Term of office expires 1917.

Eighth Councilor District—Conway, Johnson, Faulkner, Perry, Pulaski, Yell and Pope Counties. Councilor, Earle H. Hunt, Clarksville. Term of office expires 1918.

Ninth Councilor District—Baxter, Boone, Carroll, Marion, Newton, Searcy, Stone and Van Buren Counties. Councilor, Leonidas Kirby, Harrison. Term of office expires 1917.

Tenth Councilor District—Benton, Crawford, Franklin, Logan, Sebastian, Madison and Washington Counties. Councilor, J. T. Clegg, chairman, Siloam Springs. Term of office expires 1918.

Delegate to American Medical Association—C. P. Meriwether, Little Rock; R. C. Dorr, Batesville.

COMMITTEES.

Entertainment.

E. N. Davis, Little Rock, chairman; J. B. Dooley, W. T. McCurry, Little Rock.

Scientific Program.

R. C. Dorr, Batesville, chairman; Wm. R. Bathurst, Little Rock; C. P. Meriwether, Little Rock (ex-officio).

Medical Legislation.

C. A. Archer, DeQueen, chairman; F. T. Murphy, Brinkley; Wm. T. Parks, Hot Springs.

Board of Visitors to the Medical Department of the University of Arkansas.

G. A. Warren, Black Rock, chairman; W. H. Deaderick, Hot Springs; O. L. Williamson, Marianna.

Necrology.

Don Smith, Hope, chairman; Wm. Gibson, Nashville; T. T. Shackleford, Foreman.

Health and Public Instruction.

C. R. Shinault, Little Rock, chairman; H. H. Rightor, Heleua; M. Fink, Heleua.

Sanitation and Public Hygiene.

C. W. Garrison, Little Rock, chairmau; S. A. Southall, Lonoke; J. S. Wood, Hot Springs.

Cancer Research.

W. A. Snodgrass, Little Rock, chairman; C. J. March, Fordyce; H. H. Kirby, Little Rock.

First Aid.

J. P. Runyan, Little Rock, chairman; J. E. Sparks, Crossett; A. S. Buchanan, Prescott.

Infant Welfare.

F. C. Mahoney, El Dorado, chairman; H. H. Niehuss, El Dorado; Morgan Smith, Little Rock; P. H. Phillips, Ashdown; C. E. Kitchens, DeQueen.

History of the Arkansas Medical Society.

L. P. Gibson, Little Rock, chairman; C. P. Meriwether, Little Rock; Wm. R. Bathurst, Little Rock.

Memorial Tablet in Memory of the Late Dr. John S. Shibley.

L. P. Gibson, Little Rock, chairman; J. G. Eberle, Fort Smith; A. R. Hardin, Fort Smith; F. Vinsonhaler, Little Rock; M. D. Ogden, Little Rock.

Medical Expert Testimony.

L. P. Gibson, Little Rock, chairman; M. D. Ogden, Little Rock; St. Cloud Cooper, Fort Smith; C. H. Cargile, Bentonville; L. J. Kosminsky, Texarkana.

ANNOUNCEMENTS.

House of Delegates will meet on Tuesday morning at 9 a. m. in the Senate Chamber of the old statehouse. All other meetiugs of the House of Delegates will be held in the lecture room, on the ground floor.

The scientific and public sessions will be held in the Senate Chamber.

The registration desk will be in the main corridor on the ground floor.

ENTERTAINMENTS.

There will be a reception and dauce on Wednesday evening at the Shriners' Temple, Tweuty-first and Main Streets. Several other social functions will be annouuced each day by Chairman Davis.

NOTICE.

All papers read at this meeting are the property of the Arkansas Medical Society, and, as soon as read, should be handed to the secretary.

COMMERCIAL EXHIBIT.

The commercial exhibit promises to be of a high grade and will be on the ground floor.

HOUSE OF DELEGATES.

The House of Delegates will be called to order Tuesday, May 1, 1917, at 9 a. m., in the Senate Chamber of the old statehouse.

M. L. NORWOOD, *President*,
C. P. MERIWETHER, *Secretary*.

Calling meeting to order by the president.
Invocation.
Address of welcome.
Response to address of welcome on behalf of the delegates.
Appointment of Committee on Credentials.
Roll call.
Reading of minutes.
Appointment of reference committees.
President's address to House of Delegates.
Reports of committees.
Report of the chairman of council.
Report of delegates to the American Medical Association.
Secretary's report.
Treasurer's report.
Reading of communications.
Memorials and resolutions.
Selection of the Nominating Committee.
Selection for the State Board of Medical Examiners.
Miscellaneous business.
Adjournment subject to call of the president.

GENERAL SESSION.

Tuesday, May 2, 1917.

Senate Chamber.

2 P. M.

Called to order by M. L. Norwood, president.
Invocation.
Address of welcome.
Address of welcome, by R. L. Saxon, president Pulaski County Medical Society.
Response to the addresses of welcome on behalf of the Arkansas Medical Society.
President's address, by M. L. Norwood, Lockesburg.

SCIENTIFIC SESSION.

(The scientific session will begin immediately after the adjournment of the general session.)

(During the discussion of papers, speakers will please step near the president's desk, so that the audience and the stenographer may plainly hear their remarks.)

TUESDAY, 3 P. M., MAY 1.

"Labor, with Special Reference to Pituitrin, Morphin and Instruments"—Dr. A. G. Harrison, Searcy.

"Is There a Proper Indication for the Administration of Ergot Before and After Labor?"—Dr. V. L. Pascoe, Newark.

"Pregnancy and Management of Normal Labor in Country Practice"—Dr. Sam J. Albright, Kensett.

"Placenta Previa"—Dr. L. T. Evans, Mt. Pleasant.

"The Child and Tuberculosis"—Dr. T. B. Bradford, Cotton Plant.

WEDNESDAY, 9 A. M., MAY 2.

"Pneumonia"—Dr. B. H. Hawkins, Mena.

"Catarrhal Pneumonia—Its Histological and Pathological Changes"—Dr. E. E. Craig, Wilson.

"Post-gripal Otitis Media"—Dr. J. L. Jones, Searcy.

"Further Study of Focal Infection"—Dr. A. G. Lee, Texarkana.

Subject to be announced—Dr. E. D. Holland, Hot Springs.

"The Medical Value of Some of the Native Plants of the State"—Dr. J. T. Clegg, Siloam Springs.

"My Interesting Experience at the Pulaski County Hospital, and Report of a Few Cases"—Dr. A. L. Carmichael, Little Rock.

"Urticaria"—Dr. C. Travis Drennen, Hot Springs.

WEDNESDAY, 2 P. M., MAY 2.

"The Early Diagnosis and Treatment of Tabes Dorsalis"—Dr. Loyd Thompson, Hot Springs.

"The Doctor as (Medical) Expert Witness"—Dr. J. A. Lightfoot, Texarkana.

"Rural Health Problems"—Dr. J. R. Linzy, Russellville.

"Case Records for the General Practitioner"—Dr. S. W. Douglas, Eudora.

"Electro-Therapeutics"—Dr. J. K. Smith, Texarkana.

"Heat Exhaustion and Allied Conditions"—Dr. Walter G. Eberle, Fort Smith.

"Acute Salpingitis"—Dr. J. W. Butts, Helena.

"Intestinal Diverticula—Their Diseased Conditions and Treatment"—Dr. L. Kirby, Harrison.

"Acidosis"—Dr. Benj. C. Middleton, Texarkana.

THURSDAY, 9 A. M., MAY 3.

"Deductions from Two Hundred Surgical Cases"—Dr. M. D. Ogden, Little Rock.

"Fibroid Uterus in the Young, with Report of Cases"—Dr. Edwin L. Beck, Texarkana.

"Squint, and the Importance of Early Correction"—Dr. R. H. T. Mann, Texarkana.

"Hematoma of the Skull"—Dr. H. H. Rightor, Helena.

"Diseased Tonsils—Their Influence on Health; Technic of Removal"—Dr. L. H. Lanier, Texarkana.

"Fractures of the Patella"—Dr. J. M. Lemons, Pine Bluff.

"Malignant Growths"—Dr. A. Wilson Hale, Nashville.

THURSDAY, 2 P. M., MAY 3.

"Diagnosis of Surgical and Neurotic Borderline Cases"—Dr. J. N. White, Texarkana.

"The Colon, a Reservoir of Infection"—Dr. M. G. Thompson, Hot Springs.

"Shall the Doctor Tell the Truth?"—Dr. Thad Cothern, Jonesboro.

"Constipation"—Dr. J. V. Falisi, Little Rock.

"Amputation of Arm, with a Razor and Hand Saw"—Dr. M. S. Alexander, Weiner.

"Physical Defects in School Children"—Dr. H. H. Niehuss, El Dorado.

Carcinoma of the Kidney in a Child Seventeen Months Old—Dr. J. H. Fowler, Harrison.

THURSDAY, MAY 3.

House of Delegates will meet at 2 p. m.
Unfinished business.
Report of Reference Committee.
Report of Nominating Committee.
Election of officers.
Selection of place of meeting.

New and Nonofficial Remedies.

Tablets Sodium Chlorid and Citrate—Squibb (Dr. Martin H. Fischer).—Each tablet contains sodium chlorid 1 gm. and sodium citrate 2 gm. E. R. Squibb & Sons, New York.

Octochin Hydrochlorid — Ethyl-hydrocupreine Hydrochlorid.—The hydrochlorid of optochin (see above). It has the therapeutic properties of optochin, but is soluble in water. For application to the eye and instillation into the conjunctival sac, a freshly prepared 1- to 2-per-cent solution in water is used. Merck & Co., New York (Journal A. M. A., March 3, 1917, p. 713).

Optochin — Ethyl-hydrocupreine. — A synthetic alkaloid closely related to quinin. It has the anti-malarial and anesthetic action of quinin, but toxic symptoms, such as tinnitus, deafness, amblyopia or amaurosis (retinitis) are more liable to occur than with quinin. Investigations indicate that the drug may be of value in the treatment of lobar pneumonia, when its safe dosage has been determined. Reports indicate that the drug is of decided value in the treatment of pneumococcic infection of the eye (ulcus corneæ serpens). Optochin is insoluble in water, but may be used in 1 to 2 per cent solution in a bland fatty oil or as an ointment. Merck & Co., New York.

Propaganda for Reform.

Active Principle of Leeches.—The principle in the buccal secretion of the leech which prevents the clotting of blood is herudin, a deutero-albumose (Journal A. M. A., March 24, 1917, p. 931).

Betaine Hydrochlorid.—It contains 23.8 per cent absolute hydrochloric acid and 8 grains corresponds to about 18 minims of hydrochloric acid. In solution, betaine hydrochlorid dissociates into hydrochloric acid, but it is not so efficient in aiding the action of pepsin as an equivalent amount of hydrochloric acid (Journal A. M. A., March 24, 1917, p. 931).

Control of Intestinal Bacteria.—A recent investigation indicates that the direct feeding of bacterial cultures of lactic acid producing organisms had almost no influence on the intestinal flora. On the other hand, the administration of milk sugar (lactose) brought about a marked change in the intestinal flora. It appears, therefore, that the beneficent action of milk cultures is dependent on the lactose and not on the bacteria which they contain (Journal A. M. A., March 24, 1917, p. 918).

Another Shortage of Salvarsan.—The indications are that the supply of salvarsan and neosalvarsan in this country has again reached the point of exhaustion. Congress, which made our patent law, has the power to suspend the patent on any preparation that the patentee is unable to, or does not supply, when such suspension is in the interest of public health, and it should suspend the salvarsan patent. In the meantime, it is to be hoped that the Dermatologic Research Laboratory of Philadelphia will again supply the product as it did during the previous salvarsan shortage (Journal A. M. A., March 10, 1917, p. 785).

Succus Cineraria Maritima.—In agreement with the report of the Council on Pharmacy and Chemistry holding the claims made for Succus Cineraria Maritima (Walker) unfounded, the federal government charged that the claim that by dropping this preparation into the eye, cataract may be cured, was false and fraudulent. In February, 1916, the Walker Pharmacal Company pleaded guilty. Since the government's prosecution, brought under the Food and Drugs Act, affects only the claims made on the trade package of a preparation, the admittedly false claims were still made in circular letters sent to physicians as late as October, 1916 (Journal A. M. A., March 17, 1917, p. 864).

Ichthytar.—The Council on Pharmacy and Chemistry reports that ichthytar was submitted by the Szel Import and Export Company with the claim that it was essentially similar to ichthyol in composition, and superior to it in therapeutic properties. The statements that were submitted regarding its composition made it impossible to determine whether or not it was similar to or identical with ichthyol. No evidence was furnished in regard to its therapeutic value. On the basis of the available information the council held the claims regarding composition and therapeutic value unsubstantiated and ichthytar ineligible for New and Nonofficial Remedies (Journal A. M. A., March 10, 1917, p. 796).

Rheume Olum.—The Council on Pharmacy and Chemistry reports that Rheume Olum (The Rheumeolum Chemical Company, Seat-

tle, Wash.) is said to be composed of camphor 7 per cent, chloral hydrate 7 per cent, menthol 2⅛ per cent, methyl salicylate 25 per cent, oil eajuput 2½ per cent, oleoresin capsicum, lanolin, white wax, "qs." The council found Rheume olum unacceptable for New and Nonofficial Remedies because the amount of the potent oleoresin of eapsicum was not declared, because unwarranted therapeutic claims were made, because the name was nondescriptive of its composition and therapeutically suggestive, and because the fixed formula was considered irrational (Journal A. M. A., March 17, 1917, p. 865).

The Sargol Case.—The exploiters of Sargol, the get-fat-quick nostrum, were found guilty of fraud and were fined $30,000 after promising that the business would be discontinued. Sargol was made by Parke, Davis & Co. at a price of 53 cents to 78 cents per thousand tablets. Sargol was stated to eontain extract saw palmetto, caleium hypophosphite, sodium hypophosphite, potassium hypophosphite, lecithin, extract nux vomica. The trial is said to have cost the United States over $100,000. Although the business was palpably fraudulent, although the elaims made for the nostrum were palpably false, the defendants were able to employ physicians to go to the stand and swear that Sargol was a "flesh builder" and "bust developer" (Journal A. M. A., Mareh 2, 1917, p. 927).

Effect of Opium Alkaloids on the Uterus.—Aecording to D. I. Macht, morphin and the opium alkaloids having a similar constitution increase the eontraction and produce a greater tonicity of the ureter, whereas papaverin and the opium alkaloids eonstituted similarly produce a slowing or total inhibition of the contraction and relaxation of the tonus. In opium and pantopon, which contains the total alkaloids of opium, the effeet of the morphin group preponderates. Ureteral colic is due to spasmodic eontractions of the ureter caused by the irritating calculus and hence the use of papaverin or opium is more rational than that of morphin. Furthermore, the slighter toxicity of papaverin, its tonus lowing power and its local analgesic properties suggest its local application in spasmodie conditions of the ureter (Journal A. M. A., March 3, 1917, p. 719).

Obituary.

Dr. Luke F. Magee.—Dr. Luke F. Magee of Huttig, age 43, died February 20, at Mineral Wells, Tex., from nephritis. He is survived by his wife and two children.

Dr. John H. Cuffman.—Dr. John H. Cuffman of Gurdon, age 53, died March 18 in Little Roek, following an operation for appendicitis. He is survived by his wife, three daughters and one son.

Dr. William B. Welch.—Dr. William B. Welch of Fayetteville, age 88, died at his home, March 9, from cerebral hemorrhage. Dr. Welch was the first president of the Arkansas Medical Soeicty. He was one of the leading citizens of northwest Arkansas.

Dr. Samuel P. Collings.—Dr. Samuel P. Collings of Hot Springs, age 72, died at his home, March 16, from hypostatic pneumonia. Dr. Collings was one of the most esteemed and beloved praetitioners of Hot Springs.

Dr. John W. Meek.—Dr. John W. Meek of Camden died Mareh 31, age 67. He is survived by his wife and four sons.

Dr. Joseph Payne.—Dr. Joseph Payne of Hot Springs, age 83, died March 27, at Argenta. Dr. Payne was vice president of the Arkansas Medical Society in 1897. One of his sons followed the profession of his father, namely, Dr. Harry Payne of Sabinas, Mex. Another son, Brodie Payne of Owensboro, Ky., and his daughter of Argenta survive him.

County Societies.

BOONE COUNTY.

(Reported by L. Kirby.)

The Boone County Medieal Society met in Harrison, March 6. On account of an epidemie of influenza, the attendance was limited. Present: Drs. N. L. Barker, J. C. Blackburn, J. L. Johnson and L. Kirby.

Dr. Barker reported a case of puerperal venous thrombosis followed by puerperal insanity. Dr. J. J. Johnson reported a case, male, thirty years of age, from whose rectum he removed a eorn cob eight inches long. The doctor is anxious to know if other physicians have had a like experienee.

FRANKLIN COUNTY.

(Reported by Thos. Douglass, Ozark.)

The secretary has not been able to get a report ready for several months. We have had a good meeting each month of this year. The most important work done was a revision of our fee bill. The fee for obstetries is now $15.00, with a promise of better obstetrical practice. The fee for visits in town was changed from $1.50 to $2.00 for day time. Visits in the country in the day time, $1.00 per mile, with a minimum fee of $2.50. We have had no serious complaint on the part of the public on account of these increases. Many think the profession entirely justified in asking an increase in fees. We held our annual meeting and banquet in December with a good attendance. At the January meeting six members were present, and at the February meeting twelve were present. There were six at the March meeting and nine at the April meeting. Our new president, Dr. W. C. Porter of Coal Hill, has not missed a meeting so far, and presides with dignity. At the April meeting Dr. J. C. Harrod of Denning read a good paper on "Backwoods Surgery" and was complimented for attempting surgery under difficulties and succeeding.

Dr. Harrod is our delegate to the State Society.

MILLER COUNTY.

(Reported by Benj. P. Middleton, Sec'y.)

Miller County Medical Society met in regular session March 7, 1917, Texarkana, Ark.

An excellent paper was read on "The Diagnosis of Surgical and Neurotic Border Line Cases," by Dr. J. N. White of Texarkana, in which he emphasized the importance of a definite diagnosis in surgical cases in connection with neurasthenia.

A very interesting paper was also read on "Systemic Routine Thoroughness in Mastoid Surgery," by Dr. L. H. Lanier of Texarkana, in which he dealt thoroughly with the subject, putting special emphasis on the importance of closing the eustachian tubes at their entrance to the tympanic cavity to prevent reinfection.

The Bowie County Medical Society met in joint session with the Miller County Medical Society, March 23, 1917, in Texarkana. An excellent paper was read on "Post-Operative Dilatation of the Stomach," by Dr. S. A. Collom of Texarkana, in which he emphasized the importance of an early diagnosis and the immediate and persistent use of the stomach pump.

The society was gratified to have two distinguished visitors in the persons of Dr. J. L. Greene of Hot Springs, Ark., and Dr. J. S. Turner of Dallas, Tex., both of whom made short talks. There being no further business, the society adjourned.

JEFFERSON COUNTY.

(Reported by J. Frank Lieberman, Sec'y.)

A regular meeting of the Jefferson County Medical Society was held in the office of Drs. Breathwit, Jenkins and Withers, on April 3, 1917, the following members being present: Drs. Breathwit, Blankenship, Gill, Jenkins, Jordan, Lemons, Lieberman, Luck, Lowe, McMullen and Palmer.

The minutes of the previous meeting were read and approved without correction. There were no reports from outstanding committees.

Under clinical cases Dr. Blankenship reported the case of the negro he had mentioned at the last meeting. The gangrenous condition had kept extending up the limbs until it reached the knees, when both limbs were amputated at the lower third of femur. For the first ten days the right radial pulse could not be palpated, but it gradually became more distinct; but at the present time there is a difference between the right and left radials. Except for this difference in pulse, the patient made an uneventful recovery.

Dr. Breathwit related a case with the following history: A white male about thirty years old with an irrevelant past history had ten days previously had a scratch on the lower lip, to be followed by a very virulent infection without him knowing the source. When seen by himself and Dr. Jenkins, he was very anemic; the chin, lower lip and most of side of face was swollen almost beyond the point of recognition; the whole area being cyanotic with a diffuse cellulitis with many channels. Multiple incisions were done and free drainage with irrigations of bichlorid followed with Dakin's solution. A smear taken showed a mixed infection of staphlo and streptococci. Patient grew gradually worse and died on the fourth day.

Dr. Jordan related several cases he had seen similar to the one of Dr. Breathwit's, and he had diagnosed them as anthrax.

Dr. Breathwit said that he and Dr. Jenkins had suspicioned anthrax or actinomycosis and

had asked the laboratory to look especially for these two conditions, but he had gotten a negative report. Clinically he said the condition did not seem to begin as a malignant pustule.

Dr. J. F. Gill read a very timely paper on "Infant Feeding and the Associated Diseases." He first took up what constituted a normal baby at birth and the question of keeping it so later. He laid especial stress upon the importance of regular habits both for mother and baby, as well as absolute cleanliness. When pathologic disturbances do occur, he brought out the value of stopping everything by mouth except sterile water, this to be followed by or in conjunction with barley or oatmeal water. He also mentioned the value of calomel in broken doses and the use of castor oil when there was need of emptying the gastro-intestinal tract. The writer did not discuss artificial feeding, as he promised to do this at some future time.

The paper was discussed by Dr. Jordan, who emphasized the points on cleanliness and said the physician should be the teacher, for often it was pure ignorance on the part of the mother.

The president appointed the following members as a Board of Censors: Dr. J. S. Jenkins, chairman, to be assisted by Drs. T. W. Woodul and Frank Lieberman.

The motion was made to have the next meeting on the second Tuesday in May, on account of the state meeting being on the first.

The society adjourned at 9:05 p. m.

Book Reviews.

The Operating Room.—By Amy Armour Smith, R. N., formerly Superintendent of New Rochelle Hospital, New York; Superintendent of Nurses at the S. R. Smith Infirmary, Staten Island, and at the Woman's Hospital of the State of New York. 12 mo. of 295 pages, with 57 illustrations. W. B. Saunders Company, Philadelphia, 1916. Cloth, $1.50 net.

The writer of this book has slowly and assiduously pieced together, not by one continuous task, but by culling from the conversations of numerous friends in the medical and nursing profession, an idea here, a formula there, and a test somewhere else. This volume will be found useful to physicians, students and nurses.

New and Nonofficial Remedies, 1917.—Containing descriptions of the articles which have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association prior to January 1, 1917. Published by the American Medical Association, 535 Nroth Dearborn Street, Chicago, 1917. Price, $1.00, postpaid.

New and Nonoffieial Remedies, 1917, contains descriptions of the proprietary and unoffieial medicaments which the council deems worthy of recognition by the medical profession. Every physician who desires to further the cause of scientific prescribing, who is anxious to see this country purged of the blight of the nostrum, and who desires to aid in diminishing the domination of commercialism in therapeutics in this country, should have a copy of this book for ready reference.

Annual Reprint of the Reports on the Council on Pharmacy and Chemistry of the American Medical Association for 1916, with the comments that have appeared in The Journal. Published by the American Medical Association, 535 North Dearborn Street, Chicago. Price, 50 cents.

The annual reprint of the reports of the Council on Pharmacy and Chemistry for 1916 contains the reports of the council which were adopted and authorized for publication during 1916. It gives the reason why preparations which have been considered by the council were admitted to New and Nonoffieial Remedies. It also explains why certain preparations included in previous volumes are not contained in the latest (1917) edition of New and Nonoffieial Remedies. Up-to-date physicians should possess the Annual Council Reports, as well as New and Nonoffieial Remedies.

Text-Book of Surgical Operations, illustrated by clinical observations, for physicians and students. By Prof. Fedor Krause, Privy Medical Councilor, Directing Physician, Augusta Hospital, Berlin. In association with Emil Heymann, M. D., Chief Physician, Augusta Hospital. Translated into English and edited for American readers by Albert Ehrenfried, A. B., M. D., F. A. C. S., Boston. In six volumes. Volume II, with 373 illustrations, in two or more colors. Published by Rebman Company, 141, 143 and 145 West Thirty-sixth Street, New York City. 1917. Price, $7.00.

The contents of this volume includes "Surgical Proeedures in the Upper and Lower Jaw;" "Surgical Affections of the Oral Cavity;" "Surgical Proeedures on the Pharynx;" "Surgical Procedures on the Salivary Glands;" "Injury of the Salivary Glands;" "Surgery of the Facial and Cervical Nerves;" "Surgery of the Brain;" "Surgical Treatment of Epilepsy;" "Surgery of Brain Tumors;" "Operative Treatment of Brain Abscess;" "Purulent Meningitis;" "Cranial Tuberculosis and Brain Injuries;" "Closure of Defects in the Skull;" "Plastic Restoration of the Dura;" "Encephalocele and Pericranial Sinus."



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Owned and Published Monthly by the Arkansas Medical Society

VOLUME XIII
No. 12

LITTLE ROCK, MAY, 1917

Yearly Subscription $1.00
Single Copy 25c

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THE JOURNAL

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Arkansas Medical Society

PUBLISHED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. XIII. LITTLE ROCK, ARK., MAY, 1917 No. 12

Original Articles.

SOCIAL PROBLEMS OF THE FEEBLE-MINDED.*

By A. Warren Stearns, M. D.,

Out-Patient Physician, Psychopathic Hospital, Boston, Mass.

Being Contribution of the Massachusetts Commission on Mental Disease, whole number 175 (1917.9). The previous contribution (1917.8) was by A. W. Stearns, entitled "Defectives in our Prisons," to appear in Boston Medical & Surgical Journal, June 7, 1917.

Mr. Chairman, Ladies and Gentlemen:

I have chosen for my subject the social aspects of the feeble-minded, because the problem of the feeble-minded is largely a social one. Doctors, it is true, are being called upon to determine who shall be called feeble-minded, certain others have the care and instruction of the feeble-minded for a short time, but, after all, the chief burden is on society and the chief problem is a social one.

Since the beginning of organized society, certain individuals have been unable to adapt themselves to the standards of the average man. In the process of time they were divided into two groups. Certain of them were thought to be unfortunate—to have had "hard luck"—and to be deserving of aid and charity. So, for a great many years we have had the so-called pauper class. Another group were coming into conflict with society. They were thought to be bad and deserving of punishment. And so we have built up two great systems. One, organized charity boards, to look after the unfortunates and support paupers; the other, correctional institutions to reform and care for those dependents who are anti-social.

Now, these two groups have been treated as unities; little or no distinction has been made between the individual members. If a man was moderately good and was simply unable to support himself, he was treated in a certain way; was housed, clothed and fed, and perhaps some attempt made to find work for him. The other group was branded as criminal and no distinction was made between the individual members; the same punishment, care and treatment was applied to all of them.

While all this was going on, the science of medicine, particularly that branch which refers to mental diseases, began a new era, the era of rational diagnosis and treatment. A man with a headache was no longer given a pill for headache; but the cause was sought in the eye, the kidney, or what not, and treatment applied to that cause. By this modern treatment it was shown that certain individuals were acting and behaving as they did because of mental disease. So that for the past one hundred and twenty-five years or more, attempts have been made to isolate cases of insanity and apply special treatment in asylums. More recently, say within perhaps fifty or seventy-five years, it was found that certain individuals were not insane; but they had not developed mentally. They were still children, needing the care, protection and education of children.

In Italy a group of investigators began the study of criminology. They developed what they called the "born criminal," meaning that an individual in this group was apt to be a criminal.

When the modern psychiatrists examined this group of "born criminals" they found that the criminal man was but the logical sequence of the feeble-minded boy; and so now, with more exact knowledge regarding the feeble-minded, we recognize this to be perhaps the greatest factor in explaining the existence of the pauper and the criminal. As for the paupers, it is, of course, a fact that any one of us may be unfortunate and so not self-supporting and deserving of aid; yet there are certain ones who are persistently nonsupporting and who cannot be raised by any effort to a point where they can maintain

*Read before the Public Health Meeting of the Fortieth Annual Session of the Arkansas Medical Society, held in Texarkana, May 3, 1916.

themeslves. This same group bears children and this inability to support themselves is a constant characteristic of these children. We find in certain almshouses records of generation after generation of families who have been unable to care for themselves. These typical hereditary paupers are usual typical feeble-minded. One might ask the advantages of this classification if the individuals must be supported anyway. From an industrial standpoint the paupers fall into three classes —those incapable of aiding themselves anyway, those capable of partial self-support with supervision, and those capable of entire self-support with social adjustment or training. And so, without classification our greatest effort may be devoted to one entirely unable to profit by this effort, while the neglected idler of the poorhouse might under proper conditions maintain himself.

As to the relative expense of proper and improper care of the feeble-minded, the cost of maintaining schools for the feeble-minded is lower than the cost of housing paupers, and with colony care for the adult feeble-minded, it is reasonable to hope that many will be entirely self-supporting. It must also be remembered that those in institutions do not reproduce, and it has been estimated that if all feeble-minded could be segregated for thirty years, the entire group would be eliminated.

A good deal of what has been said about paupers also applies to the inmates of our penal institutions. A few years ago the reform school era began, humanitarian efforts were popularized, and an endeavor was made to substitute reform for the older idea of punishment. It was argued that if reform schools should be started, and if younger criminals could be given the proper vocational and moral training, that they could be prevented from leading the life of crime. These reform schools have not worked very well; the benefits have been quite small at best. The boys graduate from the reform school only to enter the house of correction or penitentiary, so that it is often said that they are schools of crime rather than reform.

Many careful mental examinations have been made in penal institutions and it is safe to say that 20 or 25 per cent of all inmates are definitely feeble-minded. Furthermore, these feeble-minded are the recidivists and the typical criminals. Of the total number sentenced in Massachusetts, 57 per cent have been sentenced before. These are the troublesome ones, for they average to have served seven sentences each. And so, a good deal of our work, as you see, has been at cross-purposes. We have tried to educate and reform those incapable of profiting by our effort, and to find work for those who are incapable of supporting themselves. All this goes to show the great advantages in having institutions for the feeble-minded. With this group eliminated from the paupers, we are able to carry organized charity to much better advantage. Eliminated from the criminals, we are able to bring about reform and education with less waste. We also prevent to quite a degree reproduction of feeble-minded children. Then, again, the feeble-minded, when sent to a special school, learns habits of industry and quite often is able to support and care for himself, while if allowed to be at large, he not only handicaps the normal children—his schoolmates—but acquires habits which make him a permanent criminal or pauper.

I have been told that Arkansas needs a school for the feeble-minded very badly, and I can assure you that states which have had experience with such schools are already beginning to feel the benefit both socially and financially.

EPIDIDYMOTOMY.

By Sterling Price Bond, M. D.,
Little Rock.

In all cases of posterior gonorrheal urethritis there is a possibility of the infection passing through the ejaculatory ducts, seminal vesicles and vas deferens to the epididymis.

When the infection in the epididymis (not the testicle proper) occurs, the patient probably will cease work and go to bed.

In the earlier stages there will be slight temperature, 99 to 101 degrees, discomfort, a dragging sensation in the lower abdomen of the affected side, and an exquisite tenderness on palpation of the epididymis. In severe cases there will be a temperature of 101 to 104 degrees, considerable pain when palpation of the epididymis is suggested, and absolute confinement to bed.

Under the palliative treatment the course of the disease is from four or five days to six weeks, with the constant probability of recurrence and possibility of sterility.

Epididymotomy is a more recent treatment, and one apparently decidedly indicated, since it has the following advantages over the former: The operation is simple; there is a com-

plete release from pain immediately following the operation; the temperature drops to normal, at most, in forty-eight hours; the probabilities of recurrence are practically none, and the patient is in bed only two or three days and back at work in five or six.

Operation.

In opening the scrotum, I like to make the incision anteriorly near the median line. (The scar is imperceptible in a few weeks.) The layers of the scrotum may be opened separately or at one stroke of the knife down to the tunica vaginalis testis. The parietal layer of the tunica vaginal is usually tense, due to the acute hydrocele, so care must be taken in opening the hydrocele that none of the fluid escapes into the operator's or assistant's eyes, as it often contains gonococci.

After opening the tunic and allowing the fluid to escape, the head of the epididymis is punctured with a spear-pointed needle, in search of foci of infection. The tail of the epididymis is punctured through the reflection of the tunic. Often we are rewarded with nothing but a sanguinous serum, but the pain is relieved by the relaxed tension on the tunica albuginea.

If the testicle is tense or infected, which is rarely the case, puncture may be made with a separate needle. Hemorrhage is controlled by a purse-string suture.

In closing, the parietal layer of the tunica vaginalis is left reflected as in the operation for hydrocele. A cat-gut drain is inserted and the remaining layers, including the skin, are closed with one line of sutures. The testicle is supported by an adhesive plaster bridge extending from thigh to thigh. The drain may be removed at the end of forty-eight hours when the temperature is normal, and a jockey strap worn to support the testicles and the patient allowed to get up.

Concluding, I may state in addition to the apparent advantages mentioned above, that there has not been a relapse in a score of record cases and many not of record.

DO YOU KNOW THAT

It's the spring fly which makes the summer pest?

A mosquito breeding pool may mean malaria later on?

Spring gardening has lengthened many lives?

Fresh air is the best tonic?

SYPHILIS OF THE NERVOUS SYSTEM.

By Chas. L. Gregory,
Greenville, Texas.

Wassermann tests made on all patients admitted to Bellevue Hospital, and to the Presbyterian Hospital, in New York City, showed a ratio of twenty-five syphilities per one hundred cases; the further fact developed by the Health Department of that city, that 45 per cent of the prostitutes have syphilis, warrants the allegation that syphilis is one of the greatest plagues of the age.

Syphilis is no respecter of person or color—it enters the mansion as well as the hovel; it affects men and women in every walk of life; it demands its toll in the millions.

The dogma that brain syphilis is a late manifestation, is responsible for so many cases of parasyphilis. Physicians should not delay constitutional treatment until the appearance of the secondary stage. When we use heroic treatment from the first visit with mercury and salvarsan, we may hope to curb its inroads and check the hostile germs before they reach and become imbedded in the central nervous system. White and Jelliffe say:

> *"Salvarsan and mercury are active spirochetial drugs, but it is a problem to reach the nervous system with them."*

To destroy the syphilitic germ in the nervous system is one thing, and to overcome the result of tissue changes, due to the spirochetes, is a different proposition. If nerve tissues and cells have not been destroyed, we may hope for results by the administration of mercury and salvarsan.

Unfortunately, none of the parasyphilitic diseases are cured. Paresis, tabes, tabo-paresis and pseudo-paresis always result from the degenerative influence of syphilis.

Syphilis of the nervous system, if treated in the inflammatory stage with mercury and salvarsan, usually yields to such treatment.

Paresis and pseudo-paresis sustain the same relation to brain structures that tabes has to those of the spinal cord, hence it is patent that no remedy known to man can reconstruct degenerated brain cells. In support of this position, I quote excerpt from a personal letter of Homer F. Swift:

> *"Inflammation of nerve cells can be alleviated; the degenerated nerve, of course, cannot be restored."*

We may arrest the progress of syphilis after passing the inflammatory stage in the nervous system, but the symptoms due to degeneration will continue to the end, even until death's sable curtain shall fall.

Tabes, a sequel to syphilis, in which cells in the dorsal columns are dismantled, cannot be replaced or cured. It is just as consistent to use diphtheria antitoxin for post-diphtheritic paralysis, as to continue mercury and salvarsan with the hope of a cure after destruction of tissue in paresis.

If the germs have retreated to the nervous system, treat them as a complication and cause, but it must be remembered that their destruction can have no direct influence upon tissue long since transformed by the toxic effects of syphilitic germs.

Pseudo-paresis, an organic dementia brought on by the exudates of syphilis in the meninges and blood vessels, like paresis, does not respond to treatment.

Paresis is now generally admitted as being a disease, due to the late and degenerative influence of syphilitic germs, with a gradual advancement of symptoms, with grandiose delusions at first, and finally develops into the terminal period which ends in death. It is almost impossible to recognize paresis in the early stage. The patient seldom realizes that he is ill, and it is only after symptoms have been present for weeks, and even months, that he is brought to a physician. Such patients change their manner of conduct; they no longer attend to their affairs and soon sustain loss of memory.

Mercury and salvarsan administered after the inflammatory stage of brain syphilis are always disappointing, for the reason we have degenerated nerve and brain cells, and I reiterate with emphasis, that such tissue cannot be supplied after once destroyed. In this connection, I quote from The Journal of Nervous and Mental Diseases; in discussing the parasyphilitic disease, Archibald Church says:

> *"All the modern methods, the newer remedies, and their administration by intracranial and intraspinal procedures, are still incapable of controlling the progress of these affections."*

It must be remembered that syphilis of the nervous system is not paresis.

It is possible to cure syphilis of the nervous system, but such remedies must possess the efficiency of destruction in order that the warlike weapon may effectively protect the brain cells, the mightiest fort of man's wonderful construction.

Persons infected with syphilis should have immediate, proper and vigorous treatment in order that the germs be checked before reaching the brain and its coverings.

In a good percentage of cases, just how many no man can say, the spirochetes gain access into the perivascula lymphatic spaces of the brain with a few days, frequently before local lesions are observed. When these germs are once nested in these spaces and around the blood vessels, Dr. Joseph Collins of New York City says:

> *"No effort or art on the part of the physician, or the development of an antibody on the part of nature, can destroy them."*

Nichols, Finger and Hoffman recently found syphilitic changes in the brain fluid of over 80 per cent of cases of syphilis in the primary and secondary stages, the fluid being modified in every case. Hence, we should look upon every case of syphilis as a case of possible nervous syphilis from the day of infection.

Drs. Wile and Stokes of Ann Arbor have also reported several cases of early syphilis of the nervous system.

On account of the blood supply to the brain and spinal cord being less deficient, medicine given intravenously does not hit the real seat of the germs, as we know they are frequently imbedded off from the blood current and lymph channels of the nervous system; therefore, it is manifest, but little good is accomplished by the administration of salvarsan in brain syphilis.

The wise and essential thing to do is to meet in deadly conflict and exterminate them with the weapons of mercury and salvarsan before they gain entrance into the nervous system.

Modern Medicine, by Osler and McCrae, says:

> *"The best that can be said of general paresis, is that it is an incurable affection. In the initial stages of paresis, treatment may bring about a cessation of the symptoms or a marked remission, and the patient may be enabled to return to his family for an indefinite period,"*

but his memory will be greatly impaired and mind defective.

In speaking of the treatment of paresis, Osler, than whom there is no better authority, says:

"The intraspinous treatment of general paresis with salvarsanized serum, whether according to the method of Swift and Ellis or that of Ogilvie, has not yielded satisfactory results so far as the experience of the writer goes. If we remember that the spirochetes in general paresis are imbedded in tissue of the cortex and away from blood vessels or lymph spaces, we can understand why this direct application of salvarsan can not be as effective as might be expected on theoretical grounds."

In a personal letter from Hugh T. Patrick, M. D., whose name is a household word to every physician throughout the nation, he says:

"Paresis frequently will respond to salvarsan or neosalvarsan. In my opinion, it never has been cured by either; at least, I have seen nothing to convince me that salvarsan (or neosalvarsan) either intramascularly, intraspinously, intragrainially or intraventricularly (and it has been given in all of these ways) has never cured a case or paresis."

The only hope of checking this direful and ever increasing disease, bringing havoc and death to its millions, is an early diagnosis and drastic treatment, which is best achieved by the union of mercury and salvarsan. If I could impress this fact and stamp its importance on the minds of every physician here, good would accrue from this paper.

With our present method of diagnosis, fortified with mercury and salvarsan, restraining syphilis should be fairly easy.

We doubt if any physician will gainsay that a combination of salvarsan and mercury is more effective in treating syphilis than either alone; and to urge physicians to administer them unreservedly before the virus of syphilis reaches the brain, would be asking them to do their plain duty.

Do not waste time in distinguishing between a syphilitic and non-syphilitic sore. Why guess when we can know? Why lose time and suffer the germs to find lodgment in the nervous system? We had just as well administer quinine before the malariae parasite is found, as to treat a sore before a syphilitic germ is located. Secure some of the discharge from the sore, have it examined microscopically at the earliest moment possible.

Henry J. Nicholas, M. D., Captain Medical Corps, U. S. Army, says:

"Over 50 per cent of venereal sores have been found to be syphilitic, and many of these could not be diagnosed by clinical signs or by blood examination. An analysis of these sores show that the spirochetes were found at a time when the blood was negative on an average of seven days, the spirochetes were present and the blood was positive on an average of 18 days and the spirochetes were not found but the blood was positive in 24 days."

Since the first few days mark the period of invasion of the body by the germs of syphilis, delay in treatment makes it less certain, thus the necessity for correct diagnosis and radical treatment.

In closing, we beg to submit the following:

(1.) Syphilis of the nervous system is only syphilis, and not a nervous disease.

(2.) We can and should recognize syphilis of the nervous system by proper examination in its early stages.

(3.) Syphilis of the nervous system responds to treatment in its early stages to any and all measures which cure syphilis. In its later stages, after death to the nerve cells, it is incurable by any measure.

Gentlemen, these statements presented are facts—they are startling in their terrible import. Shall we face them like men and quit ourselves as such, or shall we lie supinely on our backs, as it were, and hug the delusive phantom of hope that others will be brave enough to dare what we are afraid to do? Shall we give aid to fallen humanity, or shall we let them weaken, degenerate and die? Shall we do our duty by sounding the alarm, or shall we, by silence, give consent to man's undoing?

A LABORATORY BOOKLET.

This booklet concerns the relation of the consulting laboratory to the practicing physician, and has just been issued by the Gradwohl Biological Laboratories of St. Louis.

Its great value to the physician is, in having the information at hand in early diagnosis and control of treatment. It is especially helpful in the interpretation and technique of blood chemical tests. Readers will be especially interested in obtaining this booklet, which will be sent free upon request.

THE JOURNAL
OF THE
Arkansas Medical Society

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DR. WILLIAM R. BATHURST, EDITOR

PUBLISHED MONTHLY. Price, $1.00 a Year in Advance. Single Copies, 25 Cents.

Entered as second-class matter, June 21, 1906, at the post-office at Little Rock, Arkansas, under Act of Congress of March 3, 1879.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

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ANONYMOUS COMMUNICATIONS.
Anonymous communications will not appear in the columns of this Journal, no matter how meritorious they may be.

Editorials.

THE MAY MEETING.

Dr. William Breathwit of Pine Bluff was elected president of the Arkansas Medical Society at the closing session of the forty-first annual meeting held in the Old State House, Little Rock, May 1, 2 and 3, President Dr. M. L. Norwood of Lockesburg, presiding. Other officers elected were: Drs. H. A. Stroud, Jonesboro, first vice-president; E. F. Ellis, Fayetteville, second vice-president; W. W. York, Ashdown, third vice-president; C. P. Meriwether, Little Rock, secretary (re-elected); William R. Bathurst, Little Rock, treasurer (re-elected).

Councilors elected were: Drs. J. H. Stidham, Hoxie First District; H. H. Rightor, Helena, Third District (re-elected); Foster Jarrell, Huttig, Fifth District; J. E. Jones, Sheridan, Seventh District; Leonidas Kirby, Harrison, Ninth District (re-elected).

Delegates to the Annual Meeting in June of the American Medical Association to be held in New York City: Drs. C. P. Meriwether, Little Rock, and W. T. Wooten, Hot Springs.

Jonesboro was chosen as the place for holding the next Annual Meeting. According to the views of members expressed before the program committee acted, the scientific papers were all delivered exclusively by Arkansas talent and this was the unique feature of the meeting. Evidently it found favor with those in attendance since a majority vote indorsed the plan and favored repeating it at next year's meeting. This may be modified only to the extent of inviting some distinguished guest to deliver an address on medicine or surgery on the evening of the opening day. There is much to be said in favor of the Home Talent idea. Perhaps it may be argued that distinguished visitors might present papers of greater scientific value, but on the other hand the Home Talent plan stirs the members to action. It serves to arouse a spirit of emulation and gives members an opportunity they would not otherwise have to present papers. There is no question but that when distinguished outsiders are relied upon for the principal scientific papers, that the members feel somewhat extinguished by the more brilliant lights and refrain from taking active part on the program. The evidence of this fact is that many papers this year were contributed by members who had never before read papers before the society; and their maiden efforts were extremely creditable. It is true that some of the county societies meet only occasionally—some only once a year to elect officers—and some of the members have little opportunity to hear the big guns in the profession, if not at the Annual Meeting of the State Society. But if the mountain will not come to Mahomet, Mahomet always has the privilege of going to the mountain; and such bereft physicians can attend the meeting of the American Medical Association in New York next month, or the Southern Medical Association at Memphis in November. The first Home Talent meeting brought out good papers and there is every reason to believe that a continuation of the policy will bring still better ones in the future. The meeting on the whole was perhaps more beneficial to a greater number than any convention held for many years; and with the right sort of encouragement greater success is assured. Interesting clinics added notably to the success of the meeting. They were held at the various hospitals on the day preceding the meeting. Following is a synopsis of the proceedings:

HOUSE OF DELEGATES.

Dr. M. L. Norwood, president, called the House of Delegates to order on the first day and the Rev. Sam Campbell, pastor of the Second Baptist Church of Little Rock offered

the invocation. The address of welcome on behalf of the physicians of Little Rock, delivered by Dr. L. P. Gibson of Little Rock, was a gem of oratory, combining shafts of wit and humor with a cordiality that really made the delegates feel at home and welcome.

Committees were then appointed by the president as follows:

Credentials.—W. V. Laws, Hot Springs; F. T. Isbell, Horatio; W. H. Toland, Nashville.

By-laws and Constitution.—J. T. Clegg, Siloam Springs; H. H. Rightor, Helena; Wm. R. Bathurst, Little Rock.

Reference.—E. F. Ellis, Fayetteville; St. Cloud Cooper, Fort Smith; T. F. Kittrell, Texarkana.

The Nominating Committee, composed of the following members was named by the House of Delegates: J. C. Hughes, Walnut Ridge; L. T. Evans, Mt. Pleasant; Phil Thomas, Jr., Clarendon; E. E. Barlow, Dermott; F. O. Mahoney, El Dorado; G. E. Cannon, Hope; W. V. Laws, Hot Springs; C. R. Doyne, Little Rock; J. E. Phillips, Eureka Springs; J. G. Eberle, Fort Smith.

Rebuke to Senator Kirby.

A motion was made that a committee be appointed to draft a message to United States Senator William F. Kirby, carrying the disapproval of the Arkansas Medical Society as to his course in regard to the President's policies as expressed in the Army bill. There was a little opposition, but the motion was adopted and the committee was appointed as follows: Drs. H. H. Rightor, Helena; C. H. Cargile, Bentonville; Earle H. Hunt, Clarksville. The message they formulated, urging Senator Kirby to "get in line," and support the President or resign, was adopted, a copy wired to the Senator and the message ordered spread on the minutes of the society.

Military Surgeon Talks.

Major Clarence Cole, U. S. Army Surgeon now at Fort Logan H. Roots, and Major W. H. Abington, Surgeon, First Arkansas Regiment of the National Guard, appeared before the meeting to urge greater discretion in examining applicants for enlistment, as in many instances the government was put to the trouble and expense of sending accepted applicants to the concentration camps only to find a second examination necessary, ending with the rejection of the applicant once accepted, at the point of enlistment.

First General Session.

On Tuesday, May 1, at 2:10 p. m., the first general session was called to order by Dr. M. L. Norwood, president. The invocation was offered by the Rev. Roscoe Stapp, of Mena, after which addresses of welcome were delivered by Mayor Charles E. Taylor for the city, and Dr. R. L. Saxon, president of the Pulaski County Medical Society, on behalf of the society and physicians of Little Rock. The response was made by Dr. J. M. Lemons of Pine Bluff. Dr. M. L. Norwood then delivered the president's annual address. He especially stressed the needs of the county medical societies, the State Board of Health, the State Medical College, and favored the admission to full membership in the society of desirable undergraduates.

His address will appear in the next issue and it will be found well worthy of perusal by those who did not attend the meeting.

Nominations were then made to fill vacancies on the State Board of Medical Examiners and the following were selected from which list Governor Charles H. Brough was to make the appointments: Second district, Drs. G. A. Warren, of Black Rock, T. J. Stout of Brinkley, L. T. Evans of Mount Pleasant. Third district, Drs. E. F. Ellis of Fayetteville, Charles Hurley of Bentonville, Frank Kirby of Harrison. Sixth district, Drs. O. D. Ward of England, J. M. Proctor of Hot Springs, J. T. Palmer of Pine Bluff. Seventh district, Drs. H. H. Henry of Eagle Mills, Don Smith of Hope, J. C. Simpson of Hamburg.

The scientific session began immediately after the disposal of routine business and papers were read on obstetrical subjects, able papers all of them, and general discussion consumed the rest of the session. The papers and authors follow: "Labor, with Special Reference to Pituitrin, Morphine and Instruments," Dr. A. G. Harrison, Searcy. "Is There a Proper Indication for the Administration of Ergot Before and After Labor?" Dr. V. L. Pascoe, Newark. "A Plea for More Efficient Work in the Lying-in Chamber," Dr. H. R. McCarroll, Walnut Ridge. "Pregnancy and Management of Labor in Country Practice," Dr. Sam J. Allbright, Kensett. "Placenta Previa," Dr. L. T. Evans, Mount Pleasant. "The Child and Tuberculosis," Dr. T. B. Bradford, Cotton Plant.

SECOND DAY.

Nearly all of the second day's session was devoted to the scientific program. Among the several meritorious papers read were the following: "Pneumonia," by Dr. B. H. Hawkins, Mena; "Post-gripal Otitis Media," by Dr. J. L. Jones, Searcy; "The Value of Some of the Native Plants of the State," by Dr. J. T. Clegg, Siloam Springs; "My Interesting Experiences at the Pulaski County Hospital and a Report of a Few of My Cases," by Dr. A. L. Carmichael, Little Rock; "Urticaria," by Dr. C. T. Drennen, Hot Springs. In the course of the afternoon, Dr. C. C. Kirk, the new Superintendent of the State Hospital for Nervous Diseases, was introduced to the members by Dr. M. L. Norwood. Dr. Kirk made a good impression on his hearers in a short talk on the conditions, needs and possibilities of the institution.

THE FINAL SESSIONS.

The scientific program was continued on the morning of the last day of the meeting, the opening paper being given by Dr. M. D. Ogden of Little Rock on "Deductions from 200 Surgical Cases." Dr. E. L. Beck, of Texarkana, read a paper on "Fibrous Uterus in the Young, with Report of Cases." Several other papers also were read. The remainder of the morning session was given over to eulogies on deceased members who had died since the Annual Meeting of last year.

After adjournment for the noon hour the County Secretaries' Association met and elected officers as follows: President, Dr. C. J. March, Fordyce; and Dr. Thomas Douglas, Ozark, Secretary.

The afternoon session was chiefly consumed by the meeting of the House of Delegates in completing unfinished business, receiving of reports and the election of officers.

The titles of the papers, as recorded here, will serve to convince those not present of their earnest import. The attendance was good, fully 400 being present and the meeting will go down in the annals as one of the most satisfactory and profitable the Arkansas Medical Society has ever held.

DOCTORS AT THE FRONT.

Word comes from Washington that it is proposed to send 1,000 doctors to England and France within the next three weeks and to send at least 200 a month, together with 3,000 ambulances and 5,000 drivers. With the terrific slaughter going on in France in the desperate efforts to break through the famous Hindenburg Line, the supplying of doctors, surgeons, nurses and ambulances is one of the most important services the United States can render the Allies.

But what of the doctor who patriotically leaves his practice to go to the front? Is he to lose it and on returning have to build it up again? Is he to be penalized for patriotism?

On this subject the Surgeon General of the Medical Corps, U. S. Army, through Major Robert E. Noble, makes an appeal which is at least worthy of sincere and thoughtful consideration. He suggests that should for instance Dr. Jones volunteer to give his services at the front that the Medical Society to which he belongs should take care of his practice during his absence and restore it to him on his return. This plan has actually been adopted in England and has proven very successful, it is reported. To what extent it would be possible to restore an absentee's practice is problematical of course. There are those who may perhaps prefer to retain the substitute doctor. Such individual cases would doubtless occur, but the plan is not to be condemned on that score. It must not be dismissed without serious consideration and it is hoped the various county, city, and State medical bodies throughout the country will take the matter up and try to evolve some plan by which patriotism shall not be punished.

Abstracts.

RESISTANCE TO TUBERCULOSIS.

The nature of resistance to tuberculosis is discussed by Allen K. Krause, of Baltimore, in the April number of the *American Review of Tuberculosis*. There is no resistance to infection, as such, on the part of the human body, but once infected the individual reacts to the irritant by the formation of a barrier of tissue which mechanically prevents the further dissemination of the tubercle bacillus beyond the focus and likewise tends to diminish the circulatory interchange between the body and the interior of the tubercle. Circulatory interchange is influenced on the one hand by increased circulatory activity around the focus, such as may be brought about through hard exercise, excessive tuberculin

therapy and alcohol, and on the other hand by the extent of fibrosis at the periphery of the tubercle. Accidental anatomical relations are also of importance in determining the course of the tuberculous infection. Absorption from the focus varies inversely with density of the fibrous envelope and determines symptoms.

The reaetivity of an individual depends upon the individual's response to irritation. This reaction is modified by infection with tubercle bacilli. At the first infection the number of the infecting baeilli will determine the proportions of the vsaeular cellular elements that make up the resulting tubercle, though the end result is always the same, *focal* tubercle.

After reinfeetion the inflammatory reaction appears earlier, is accelerated and subsides more quickly. There is an altered reaction of all the tissues due to the specific irritant in the presence of established anatomic tubercle, a hypersensitiveness that results in overaction. This further does not depend upon the serum content of agglutinins, precipitins, opsonins, etc., which may be called out in a non-tuberculous animal by treatment with various tuberculins. During overreaction the symptoms of *acute* illness are present. The tissue changes may be of an exudative, inflammatory charaeter, such as are found in diffuse tubereulous lesions, pneumonias, effusions, etc. These oeeur only as the result of reinfeetion, and their extent depends upon the size of the reinfection dose.

The article concludes with a plea for the systematic study of the successive phases of tissue reaction to irritants under varying conditions of host and parasite.

CHRONIC NEPHRITIS.

Joseph Collins, New York (*Journal A. M. A.*, May 5, 1917), speaking of the difficulty of diagnosis of brain tumors, mentions and describes a case of chronic nephritis recently observed by him, in which the symptoms were chiefly those of cerebral tumor, developing in the typical way. Taken in conjunction with the fact that they began about two or three years after a head injury, whieh is also very often the beginning of brain tumor, the diagnosis of the latter eould not be unconsidered. While it is possible for a person to have both chronic nephritis and brain tumor, he holds that it is not necessary to assume this in the case, since the vasculorenal disease is adequate to explain the phenomena alone. The symptoms in brief were headache, dizziness, occasional uncertainty in walking, nausea and vomiting, failing vision and general weakness, and there was a marked papilledema which could not be accurately measured. The evidences of chronic nephritis were vascular hypertonus, polyuria, the findings of the urinalysis, the secondary anemia, the cachexia, dyspnea, together with the headache, vomiting, and choked disks which may occur both in tumor and kidney disease. It is generally accepted that choked disks occur at times in nephritis but very little mention is made of it in the literature, while the occurrence of choked disks in chlorosis has been often referred to. It may quite well be that the papilledema in chronic nephritis is possibly due to the secondary anemia; if it is the result of increased pressure of fluid in the vaginal sheath of the optic nerve, it should subside under the measures taken for edema in other parts of the body. If, on the other hand, the neuritis is a toxic one, it is not likely that it will subside. In the case reported, the patient was treated for the kidney disease, and improvements soon occurred in the brain symptoms as well as in the others. The elevation of the disks has subsided but not disappeared, while the ophthalmoscope shows a fairly typical picture of albuminuric retinitis.

Personals and News Items.

D.r Walter M. Dake of Hot Springs has moved to Denver, Colo.

Dr. J. C. Minor of Hot Springs visited in Memphis and Little Rock this month.

Miss Della J. Purifoy, assistant secretary of the Southern Medical Association, visited in Little Rock during the meeting of the Arkansas Medieal Society.

Dr. Wm. A. Dashiell of Little Rock has been appointed first lieutenant, Medical Reserve Corps, U. S. Army, following an examination on April 20, at Hot Springs.

Dr. J. R. Linzy of Russellville was re-elected state medieal examiner of the Modern Woodmen at their annual meeting this month at DeWitt.

Dr. Robert B. Moore of Searcy, recently located in New York City, has secured an office in the Southern Trust Building, Little Rock, and announces his practice limited to diseases of the nose, throat and ear.

Virulent smallpox has been present in Austin, Texas, since the fourth week in January. Incomplete reports which have been received give a total of 123 cases up to April 21, of which at least 22 had proved fatal. The greatest numbers of cases were reported during the weeks ended April 7 and April 14, when 25 and 22 cases, respectively, were reported.—U. S. P. H.

Read the new gelatin advertisement in this issue and send for their "Test Assortment" and the receipt book, mentioning this Journal. Gelatine is distinctly a modern food. In our grandmother's day the preparation of a gelatine dessert was a task requiring such a degree of skill, patience and effort that it was not frequently attempted. But today, when the many brands of commercial gelatine make its use simple and convenient so that it has become an every-day article of diet—the question of its dietetic value becomes of interest.

NEW HOSPITAL AT TEXARKANA.

The Texarkana Hospital and Training School has purchased the residence and property of Dr. Nettie Klein, adjoining its present location, and has begun the erection of a new modern hospital on the same. The management is also remodeling the old plant. An investment of $65,000 was made to build this new hospital, which when complete will have fifty beds and will be strictly modern in every respect.

AFLOAT AND ASHORE.

Two new products which are attracting unusual attention, both in this country and abroad, are *Chlorazene* (Abbott), Dakin's New Antiseptic, and *Parresine* (Abbott), the improved, hot-wax dressing for burns. Both of these remedial agents have been passed by the Council of Pharmacy and Chemistry of the American Medical Association, to appear in their "New and Non-Official Remedies," and have been ordered by the United States Navy to be placed on every ship.

The results which are reported by surgeons and hospitals in the use of *Chlorazene* and *Parresine* are so remarkable that it would surely pay every physician to become better acquainted with these products.

Literature will be sent on request to The Abbott Laboratories, Chicago, Illinois.

BREAD IN THE HOME.

Government Specialists Test Its Value and the Best Way of Preparing It.

If home-baked bread were uniformly well made it would be used more extensively than at present in place of more expensive food, say specialists in the U. S. Department of Agriculture, and this would be a distinct economy. From the standpoint of nutrition it makes very little difference whether breadstuffs are served in the form of bread or in the form of breakfast cereals, side dishes with meat, or desserts. A man engaged in moderate muscular work can profitably consume about three-quarters of a pound a day of breadstuffs in any one of these forms. This quantity is the equivalent of one pound of baked bread. As a matter of fact, however, it is not probable that in the average family this quantity is consumed and the deficiency is made up by the use of more expensive substances. Of course, bread alone is not sufficient for the maintenance of health, but from both an economical and a hygienic point of view should be uesd more extensively than it usually is.

In a new publication of the Department, Farmers' Bulletin 807, detailed directions for the making of bread in the home are given, together with a number of convenient recipes for home-made bisenit, rolls and bread in which rice or potatoes are used with flour. The bulletin also gives a score card by means of which it is suggested the housewife can estimate the merit of her product.

New and Nonofficial Remedies.

Ferric Cacodylate; Iron Cacodylate.—A ferric salt of cacodylic acid containing from 39.7 to 44.9 per cent arsenic (As). A grayish-brown powder, soluble in water. The use of ferric cacodylate has been proposed in cases where the effects of iron salts and the mild arsenic effect of cacodylates is desired. Dosage: From 0.015 to 0.1 Gm.

Ampules Iron Cacodylate.—Mulford, 0.03 Gm.—Each ampule contains ferric cacodylate 0.03 Gm. in 1 Cc. solution. The H. K. Mulford Co., Philadelphia.

Ampoules Iron Cacodylate—Squibb, 0.03 Gm.—Each ampule contains ferric cacodylate 0.03 Gm. in 1 Cc. solution. E. R. Squibb and

Sons, New York City (Jour. A. M. A., April 7, 1917, p. 1043).

Acetylsalicylic Acid—Squibb.—A non-proprietary brand of acetylsalicylic acid complying with the standards of New and Nonofficial Remedies. E. R. Squibb and Sons, New York City.

Aspirin, L. & F.—A non-proprietary brand of acetylsalicylic acid complying with the standards of New and Nonoffieial Remedies. Lehn & Fink, New York City (Jour. A. M. A., April 28, 1917, p. 1261).

Propaganda for Reform.

Citric Acid and Citrates.—Citric acid and the alkali citrates, potassium citrate and sodium citrate, are oxidized in the body with formation of carbonates and hence tend to increase the alkalinity of the blood. Citric acid and the alkali citrates tend to render the urine less acid and, in large doses, render it alkaline (Jour. A. M. A., April 21, 1917, p. 1206).

Cyanocuprol.—Studies of the effects of "cyanocuprol" on tuberculous processes, carried out by Japanese investigators, have been published. "Cyanocuprol" is stated to be a copper cyanid preparation, the exact composition of which is being kept secret. Even if its identity should become known, the use of "cyanocuprol" is decidedly in the experimental stage (Jour. A. M. A., April 7, 1917, p. 1057).

Sterling Violet Ray Generator.—This is a small frequency apparatus with some vacuum and possibly other electrodes. The apparatus is not one for producing violet or ultra-violet rays in the scientific meaning of those words. The apparatus will not do the things claimed for it in the advertising booklet which includes the treatment of practically every ailment known to mankind (Jour. A. M. A., April 14, 1917, p. 1141).

Ambrine.—Ambrine is a French, secret preparation that has been on the market for many years. It has recently come into prominence through sensational articles in the lay press. For all practical purposes it is solid paraffin to which some material has been added to make it adhesive and more plastic. For use it is heated until liquid and then applied to open wounds and burns, forming a relatively impervious dressing (Jour. A. M. A., April 7, 1917, p. 1057).

Pepsodent.—Wm. J. Gies writes that Pepsodent is a dentifrice widely advertised as a mucin digestant. In a research conducted for the First District Dental Society of the State of New York, Professor Gies and Miss Franke found that the digestive claims were not warranted in any degree. Gies holds that there is about as much common sense in the proposed use of Pepsodent for this purpose as there is in the oral administration of a few grains of Lactopeptine to improve impaired tryptic digestion in the intestines (Jour. A. M. A., April 28, 1917, p. 1278).

Hexamethylenamin in Pylelitis.—I. A. Abt advises caution in the administration of hexamethylenamin in the pyelitis of infants. It should be under continuous observation and its use should be continued for an extended period. The urine should be frequently examined for blood. Abt has more than once seen cases of fatal nephritis which he believes due to the overuse of hexamethylenamin. He advises that, if given to infants under one year of age, it should be given in one grain doses followed by water. This dose may be repeated four or five times daily (Jour. A. M. A., April 14, 1917, p. 1100).

Pharmacology of Stovaine.—M. I. Smith and R. A. Hatcher find that in toxic doses stovaine produces death in animals by inducing immediate and simultaneous paralysis of the heart and the respiration, the action on each being independent of the other. They find that stovaine disappears rapidly from the blood stream after its intravenous injection. Stovaine is slightly more toxic than novocaine by similar modes of administration and complete recovery does not follow the administration of toxic doses of stovaine so promptly as it does with corresponding doses of novocaine (Jour. Pharm. and Exp. Thera., Jan. 1917, p. 231).

The Luetin Test.—Confirmatory of previous investigations, H. N. Cole and H. V. Parysek find that some non-syphilitics respond positively to the luetin test and that in those non-syphilitics who do not respond spontaneously the reaction can generally be provoked by iodides. They also demonstrated that the reaction may be provoked by potassium nitrate and potassium bromide. Proving that the potassium ion in the potassium iodide and bromide was not concerned in the reaction, they found that the leutin test may be provoked by sodium bromide, sodium iodide and

calcium bromide (Jour. A. M. A., April 14, 1917, p. 1089).

PARAFFIN FILMS.—The popular propaganda for "Ambrine" having brought the paraffin film treatment of burns into prominence, Torald Sollmann has instituted experiments to devise a suitable, open formula preparation which is simple and yet meets all requirements. He suggests that surgeons who desire to experiment with the paraffin treatment of burns use simple preparations of known composition. Ordinary paraffin melting at about 50 C. (122 F.) appears to possess practically the mechanical properties of "Ambrine." A mixture containing some asphaltum (asphalt varnish, Trinidad or Bermudez, "asphalt cement" and Texas asphalt were tried) gives a preparation of superior pliability. Other formulas are given and their trial suggested (Jour. A. M. A., April 7, 1917, p. 1037).

ABOLITION OF THE SALVARSAN PATENT.—The Chicago Medical Society and the St. Louis Medical Society urge the abolition of the Salvarsan patent. The patent should be abrogated, not only because the patentees have not supplied the demand, not alone because they have dictated to the medical profession who should have the drug and how much a physician might have, not alone because of the war with Germany, not alone because of the special needs of the government at this time for the control of venereal diseases, not alone because, as some claim, the patent at Washington does not correctly describe the product, but also because the people who are supplying this product are charging prices that are exorbitant. In order that a sufficient supply, to control the ravages of one of the most serious diseases that afflict humanity, may be assured, it is the duty of Congress to abrogate the Salvarsan patent (Jour. A. M. A., April 21, 1917, p. 1187 and 1203).

PIPERAZIN AND OTHER ORGANIC URATE SOLVENTS.—From a review of the literature, P. J. Hanzlik concludes: there is no reliable evidence to show that piperazin, in small or therapeutic doses, imparts to urine urate solvent qualities, either by direct addition or after excretion; excessive doses produce a slight but negligible increase in uric acid excretion, the same being effectively produced by sodium bicarbonate or sodium citrate; there is no reliable evidence to indicate that piperazin can remove or prevent urate deposits; diuresis is uninfluenced by even large doses of piperazin and its administration does not materially reduce the acidity of the urine; scientific evidence, though limited, and clinical opinion indicates that piperazin is valueless in gout. Hanzlik also reports that there is sufficient evidence to indicate the worthlessness of the following as urate solvents: quinic acid, quinoline, colchicum, piperidin, Urosin, Lycetol, Sidonal, Lysidin and Urol (Jour. Lab. and Clin. Med., Feb., 1917, p. 308).

CORPORA LUTEA (SOLUBLE EXTRACT).—The Council on Pharmacy and Chemistry reports that "Corpora Lutea (Soluble Extract)" marketed by Parke, Davis and Co., in the form of ampules for hypodermic administration is ineligible for admission to New and Nonofficial Remedies, because it is a secret preparation advertised under extravagant claims. No statement of composition is made beyond the indefinite claim that it is an aqueous solution of "soluble Corpora Lutea Extract", each ampules corresponding to 0.2 gm. desiccated gland. How these soluble products are obtained, whether they represent all the water-soluble principles, or whether some have been eliminated is not stated. The claims made for the action and uses of the preparation do not make clear the essentially experimental status of the article and are therefore misleading. Further, the use of this extract is advised not only in functional amenorrhea and the ordinary reflex consequences of physiologic or artificial menopause, but also in conditions where the expectation of benefit cannot possibly be fulfilled (Jour. A. M. A., April 7, 1917, p. 1056).

Married.

HURRLE-WALKER.—The marriage of Dr. Frank E. Hurrle of Little Rock to Miss Mary V. Walker of Pine Bluff, took place in Pine Bluff on Tuesday, April 17.

Obituary.

DR. JAMES A. FERGUS.—Dr. James A. Fergus of Elm Springs, Washington County, died May 7, at the home of his mother. Age 35.

A good water supply in the spring may save an undertaker's bill in the fall?

Today is the best time to begin to build for health?

County Societies.

JOHNSON COUNTY.

(Reported by Frank Lieberman, Sec'y.)

A regular meeting of the society was held in the offices of Drs. Breathwit, Jenkins and Withers on May 8. The Vice-President, Dr. Wm. Blankenship, presiding, the President, Dr. Palmer, being absent.

The following members being present: Drs. Breathwit, Blankenship, Glover, Jordan, Lemons, Lieberman, Lowe, McMullen, Pittman, Shelton, Thompson and Woodul.

The minutes of the previous meeting were read and approved without correction.

Under miscellaneous business it was voted that Dr. Hankinson be permitted to run a professional card in the papers for a reasonable length of time.

Dr. Lemons gave his report as delegate from the society to the State meeting. He said there were about two hundred men to register on the first day and before the finish there were about three hundred and thirty-five or forty enrolled. He also said that he had been made Councilor from this district to fill the vacancy caused by Dr. Breathwit's election to the Preisdency of the State Society.

Dr. Breathwit thanked the society for its support in electing him President saying that he realized the honor that had been conferred upon him and that he would do all within his power to merit the confidence placed in him. He asked that the members of Jefferson offer suggestions that might benefit the State Society, saying that at present he thought it a good idea to have less papers read and more discussion on the floor. He being of the opinion that the members benefited more from the discussion than from the paper itself.

Dr. Jordan indorsed the idea of Dr. Breathwit and suggested that the papers be turned over to a committee who should have the authority to eliminate those undesirable and devote more time to discussion of the good ones. He also stated that the Board of Control of the Florence Sanitarium extended an invitation to all members of, or those eligible to membership in the State Medical Society, the privilege of bringing patients to the institution, assuring them of prompt, scientific and courteous treatment.

The Society indorsed Dr. J. T. Palmer as a candidate for membership on the State Board of Medical Examiners.

Adjourned at 9:30.

Book Reviews.

Personal Health.—By William Brady, M. D., Elmira, N. Y. 12 mo. of 407 pages. W. B. Saunders Company, Philadelphia, 1916. Cloth, $1.50 net.

In this book much practical information that may properly be considered under the head of personal health for discriminating people is given in a form readily assimilable by a lay reader.

International Clinics.—A quarterly of illustrated clinical lectures and especially prepared articles by leading members of the medical profession throughout the world. Edited by H. R. M. Landis, M. D., Philadelphia. Vol. I. Twenty-seventh series, 1917. Published by J. B. Lippincott Company, Philadelphia. Price of the book is $2.00.

Among the interesting articles in this number we wish to mention the one by Dr. Max Askanazy, professor of Pathology at the University of Geneva, Geneva, Switzerland, on "Personal Researches on the Nature of Chloromata." A colored illustration is given of chloroma surrounding the sternum.

The book closes with a very instructive review of the "Progress of Medicine During the Year 1916," by Drs. Frank A. Craig and John Speese.

The Practice of Gynecology.—A text-book on the Practice of Gynecology. For the practitioners and students. By W. Easterly Ashton, M. D., LL. D., Professor of Gynecology in the Graduate School of Medicine of the University of Pennsylvania. Sixth Edition, thoroughly revised. Octavo of 1,097 pages, with 1,052 original line drawings. W. B. Saunders Company, Philadelphia, 1916. Cloth, $6.50 net; half morocco, $8.00.

This book presents completely both the medical and surgical aspects of gynecology. In the diagnosis and treatment, Prof. Ashton shows each step of the various methods, as well as the different operations by separate drawing, in order to clarify the text and enable the reader to see at a glance the details of the several procedures.

The present edition has been carefully revised. Many changes have been made in the etiology, pathology and treatment to conform with recent advances.

Stanolind
Trade Mark Reg. U. S. Pat. Off.
Liquid Paraffin
(Medium Heavy)
Tasteless—Odorless—Colorless

Before Operation

Stanolind Liquid Paraffin is an ideal laxative for surgical practice.

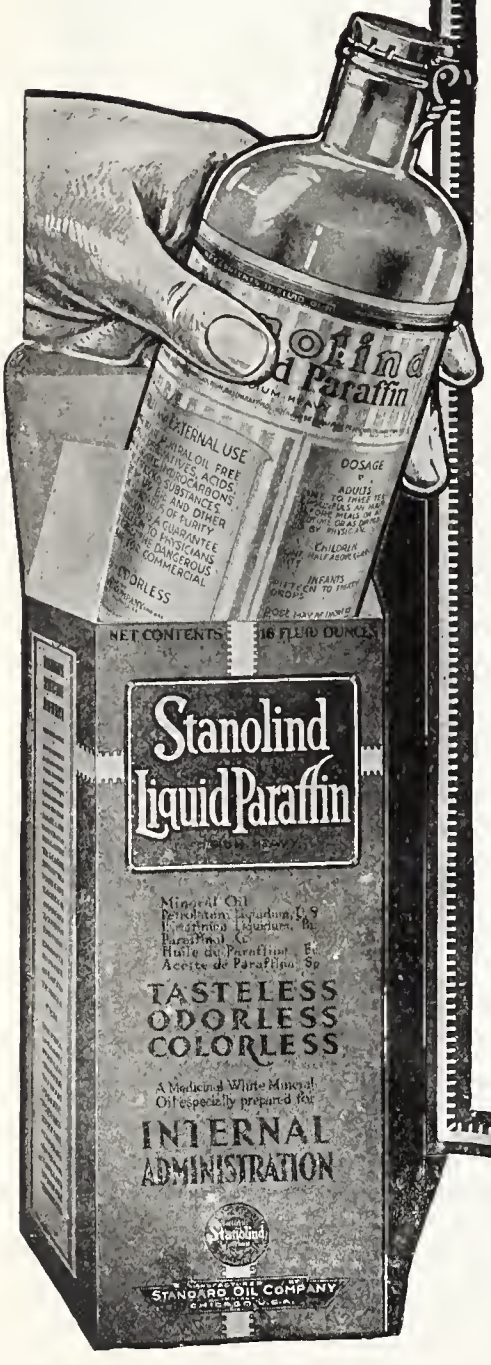
When used in the proper dose, it thoroughly empties the alimentary canal, without producing irritation or other undesirable effects.

It is particularly valuable in intestinal surgery, because it leaves the stomach and bowels in a quiet state, and because its use is not followed by an increased tendency to constipation.

After an abdominal operation, one or two ounces of Stanolind Liquid Paraffin may be given through a tube while the patient is still under the anaesthetic, or as an emulsion, an hour or two later.

Stanolind Liquid Paraffin is essentially *bland* in its action, causing a minimum amount of irritation while in stomach or intestine. It may also in most cases be gradually reduced without apparently affecting the frequency of the evacuations.

A trial quantity with informative booklet will be sent on request.



Standard Oil Company
(Indiana)
72 W. Adams St.
Chicago, U. S. A.

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